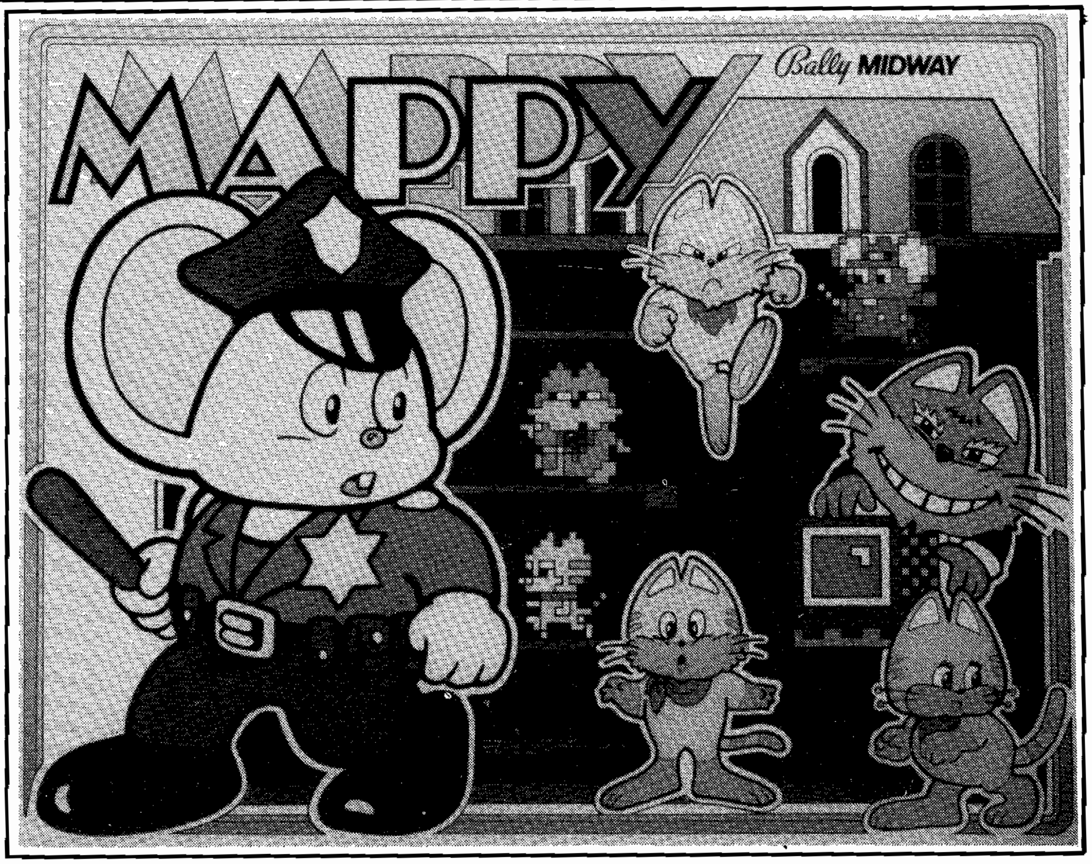
LICENSED BY NAMCO

April 1983
Game Nos. 353 & 361



Parts and Operating Manual



NO. 353 UPRIGHT



NO. 361 COCKTAIL

Bally

MIDWAY MFG. CO.

10750 W. Grand Avenue
Franklin Park, Illinois 60131
U.S.A.

Phone: (312) 451-1360 Cable Address: MIDCO Telex No.: 72-1596

Form No. 0353-00300-0000

WARNING

THIS GAME MUST BE GROUNDED. FAILURE TO DO SO MAY RESULT IN DESTRUCTION TO ELECTRONIC COMPONENTS.

WARNING: This equipment generates. uses. and can radiate radio frequency energy and if not and used in accordance with the instructions manual. may cause interference to radio communications. It has been tested and found to comply with the limits for a CLASS A computing device pursuant to SUBPART J of PART 15 of FCC RULES. which are designed to provide reasonable protection against such interference when operated in a commerical environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

ELECTRICAL BULLETIN: FOR ALL APPARATUS COVERED BY THE CANADIAN STANDARDS ASSOCIATION (CSA) STANDARD C22.2 NO. 1, WHICH EMPLOYS A SUPPLY CORD TERMINATED WITH A POLARIZED 2-PRONG ATTACHMENT PLUG.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR. UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

Bally/MIDWAY T.M.

Invites You To Use

OUR TOLL FREE NUMBERS FOR SERVICE INFORMATION CONCERNING THIS GAME, OR ANY OTHER BALLY/MIDWAY™ GAME YOU NOW HAVE ON LOCATION.

CALL US FOR PROMPT, COURTEOUS ANSWERS TO YOUR PROBLEMS.

Continental U.S. 800-323-7182
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Printed in U.S.A.

TABLE OF CONTENTS

DESCRIPTION **PAGE**

MAPPY

I. Game Operation

MAPPY is a one or a two player game with a color T.V. monitor. The game gives a display which has all the parts shown on Page 1-7.

SELF-TEST MODE

The Self-Test mode is a special mode for checking the game switches and computer functions. It is the easiest and best way to check for proper operation of the entire game.

The game has five possible modes of operations: ATTRACT, READY-TO-PLAY, PLAY, HIGH SCORE/INITIAL, and SELF-TEST.

NOTE: Putting the game into Self-Test will cause it to erase any CREDITS it has on it from its memory.

You may begin a Self-Test at any time after the power to the game is on by sliding the Self-Test switch to the "ON" position. Now that the game is in the Self-Test mode, it will react as follows:

1. First, you will see several moving multicolored patterns appear on the screen.
2. Immediately following this, a right side up test display is shown on the monitor screen. The game will remain in this Self-Test mode until you set the Self-Test switch back to the "OFF" position. These test displays are shown below.

SELF-TEST DISPLAY
AND BOARD LOCATION COORDINATES

SCROLL 00 THROUGH FB (COUNTS IN HEXIDECIMAL - CONTROLLER HELD TO RIGHT FIRST)
RAM OK or (a number i.e. 5, 7, etc.)
ROM OK or (a number i.e. 1, 4, etc.)
I/O OK or (a number i.e. 1, 2, etc.)
UPRIGHT - or - COCKTAIL
1 COIN 1 CREDIT
1 COIN 1 CREDIT
RANK A, B, C, D (DIFFICULTY LEVEL - A = EASIEST SETTING)
MAPPY 3 (OPERATOR SELECTABLE)
SOUND 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23
ATS ON
RND OFF (THIS IS A RACK ADVANCE MODE)
1st BONUS FOR 20000 PTS. (OPERATOR SELECTABLE)
2nd BONUS FOR 70000 PTS. (OPERATOR SELECTABLE)

3. If a bad ROM or RAM chip is found by the games internal check system during the Self-Test, the game indicates this to you by showing the location code of the bad chip(s) on the SCREEN. The following table translates the chip location codes into actual positions on the games P.C. Boards.

RAM TEST INDICATIONS AND THEIR MEANINGS

INDICATION	MEANING	CHIP LOCATION
RAM OK	NO RAM IS OUT OF ORDER	
RAM 1	RAM 1 on VIDEO PCB is no good	2H
RAM 2	RAM 2 on VIDEO PCB is no good	2J
RAM 3	RAM 3 on VIDEO PCB is no good	2N
RAM 4	RAM 4 on VIDEO PCB is no good	2L
RAM 5	RAM 5 on VIDEO PCB is no good	2M
RAM 6	RAM 6 on C P U PCB is no good	3K or 3L
RAM 7	RAM 7 on C P U PCB is no good	2D

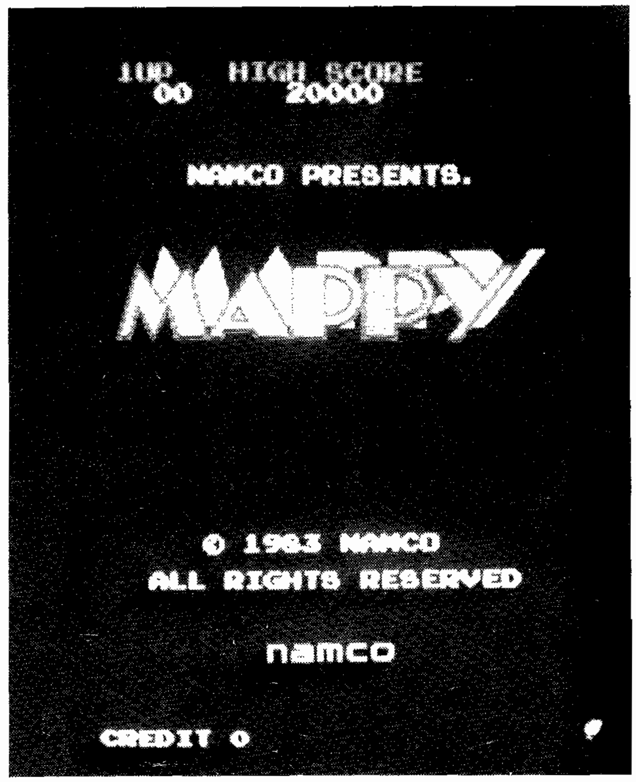
ROM TEST INDICATIONS AND THEIR MEANINGS

INDICATION	MEANING	CHIP LOCATION
ROM OK	NO ROM IS OUT OF ORDER	
ROM 1	ROM 1 on CPU PCB is no good	1D
ROM 2	ROM 2 on CPU PCB is no good	1C
ROM 3	ROM 3 on CPU PCB is no good	1B
ROM 4	ROM 4 on CPU PCB is no good	1K

I/O TEST INDICATIONS AND THEIR MEANINGS

INDICATION	MEANING	CHIP LOCATION
I/O OK	NO BIT IS OUT OF ORDER	
I/O 1	BIT C P U 1 is out of order	4F
I/O 2	BIT C P U 2 is out of order	4C

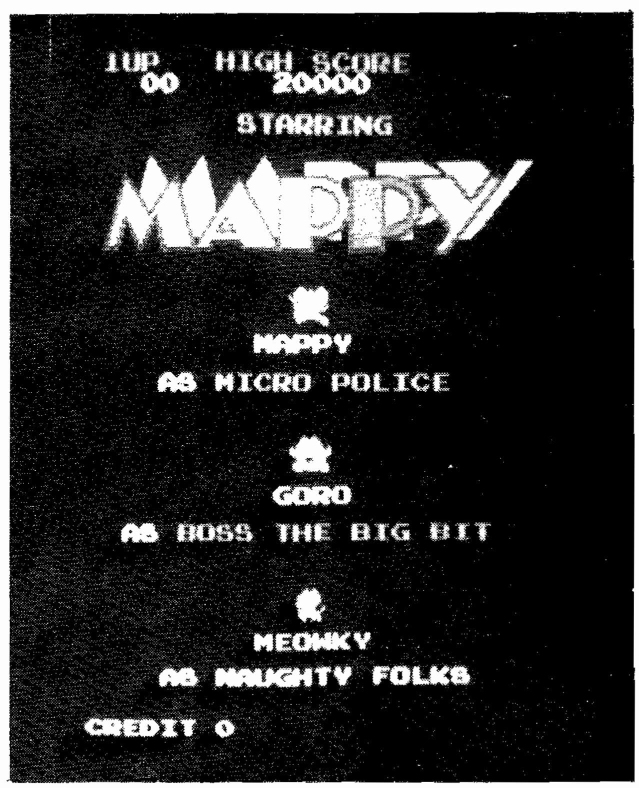
4. "RANK" is a difficutly setting with "RANK A" being the **least** difficult level of play and "RANK D" being the **most** difficult level of play. See the "OPTION SWITCH SETTINGS" table.
5. To check "SOUND" (the game has 23 different sounds):
   a) Move the controller to the right momentarily and release it - "SOUND" number changes from "00" to "01" and you hear sound "01".
   b) Press any button or activate the coin switches and sound "01" will change to sound "02" and it is heard.
   c) Repeat Step 2 with a different button or switch, etc. and - "SOUND 02" changes to "SOUND 03" and it is heard - and so on.
6. To check your game function switches and buttons (coin counter switches, door opening button, 1 PLAYER and 2 PLAYER buttons): activate each one while the game is in the Self-Test mode. You should hear a different game sound for each activation. If you do not hear it, the switch/button is either not working, miswired, or disconnected. Check it out thoroughly.
7. If you wish to produce **only** a CROSS HATCH test pattern on the monitor screen for further use, slide the Self-Test switch to the "ON" position and hold PLAYER 1's controller to the right (WILL NOT WORK WITH PLAYER 2'S CONTROLLER). The CROSS HATCH pattern will scroll on to the screen.
8. When finished with the Self-Test mode, slide the Self-Test switch back to the "OFF" position.
9. Normal game functions will now return to the monitor screen.



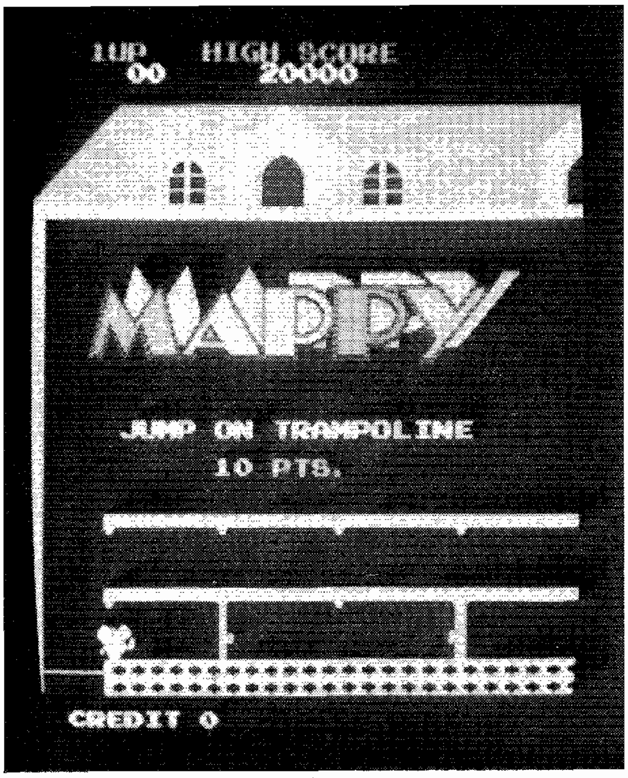
Attract Mode Display 1

ATTRACT MODE

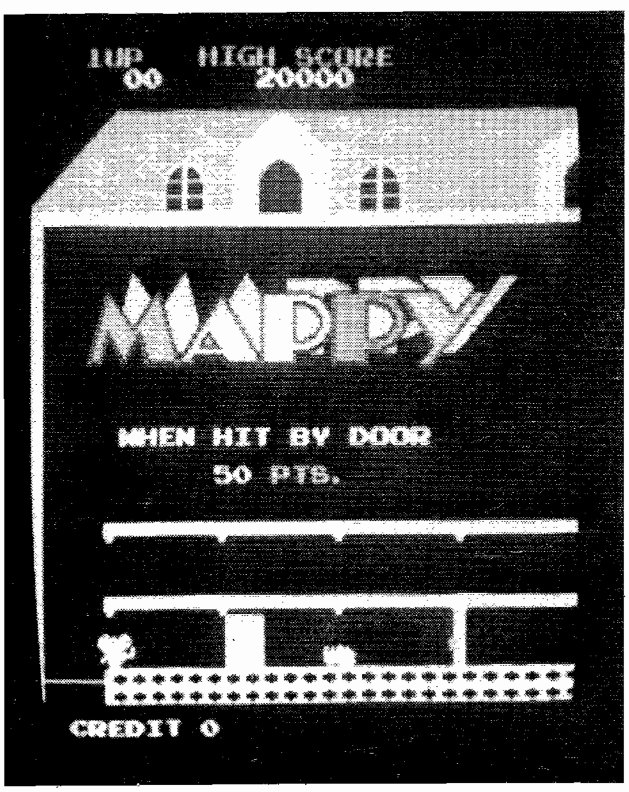
1. The Attract mode starts:
   - ☐ Just after power has been turned on to the game. (Self-Test switch is in the "OFF" position.)
   - ☐ After a Self-Test has been completed. (Performing a Self-Test sets the credits in the games memory to zero "0".)
   - ☐ After a play has been finished, the score was not high enough to put the game into the High Score/Initial mode, and there are no more credits left in the games memory.
   - ☐ After the High Score/Initial mode when there are no more credits left in its memory.
   - ☐ In the Attract mode, the game will give the following displays **centered** on the monitor screen:



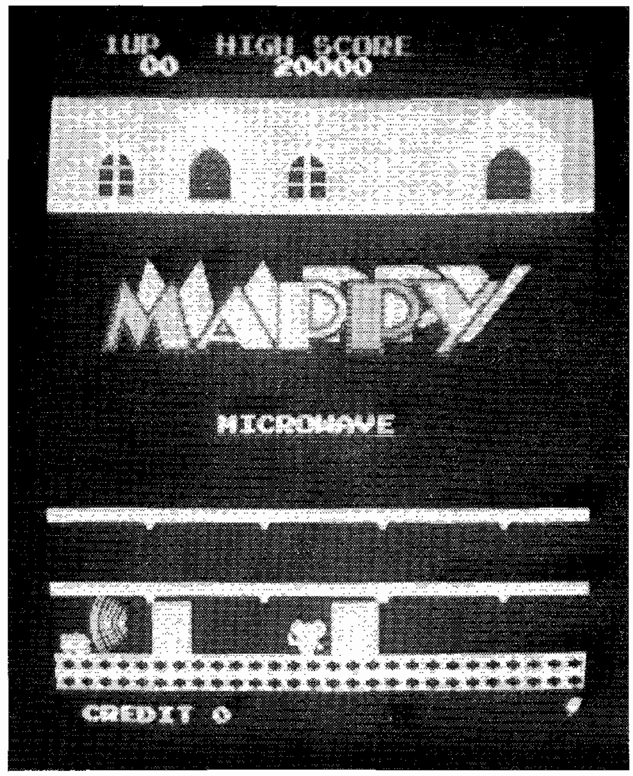
Attract Mode Display 2



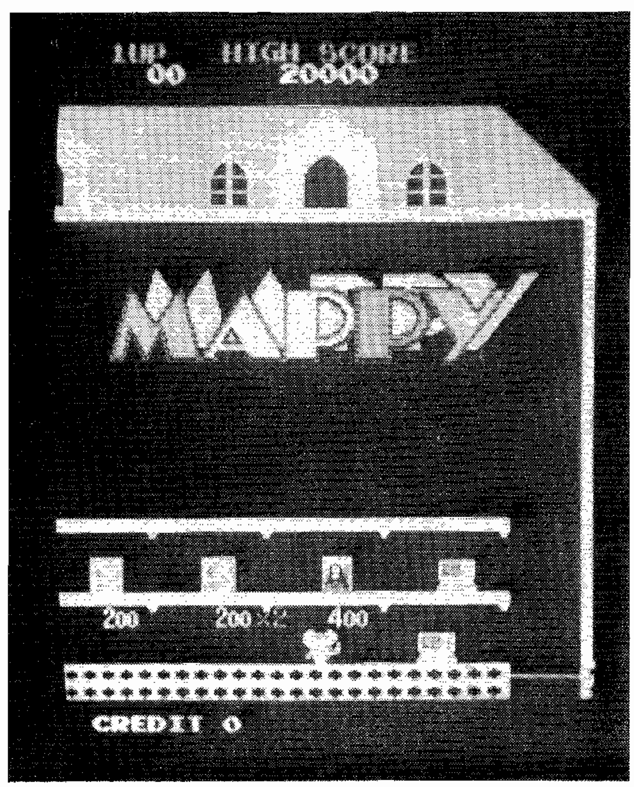
Attract Mode Display 3



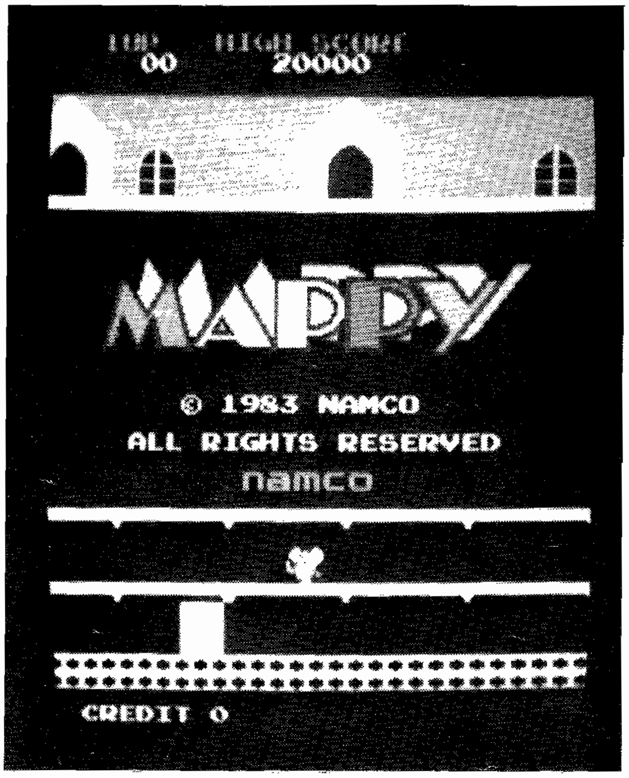
Attract Mode Display 4



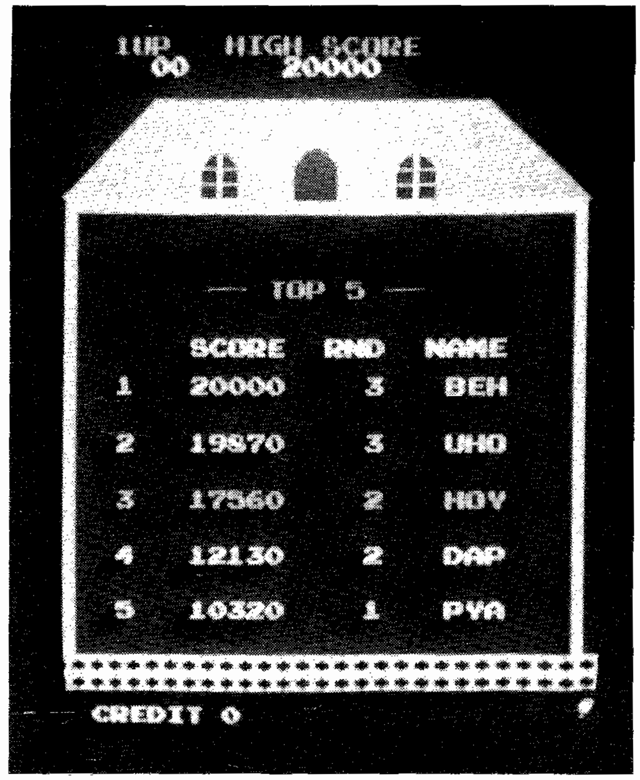
Attract Mode Display 5



Attract Mode Display 6

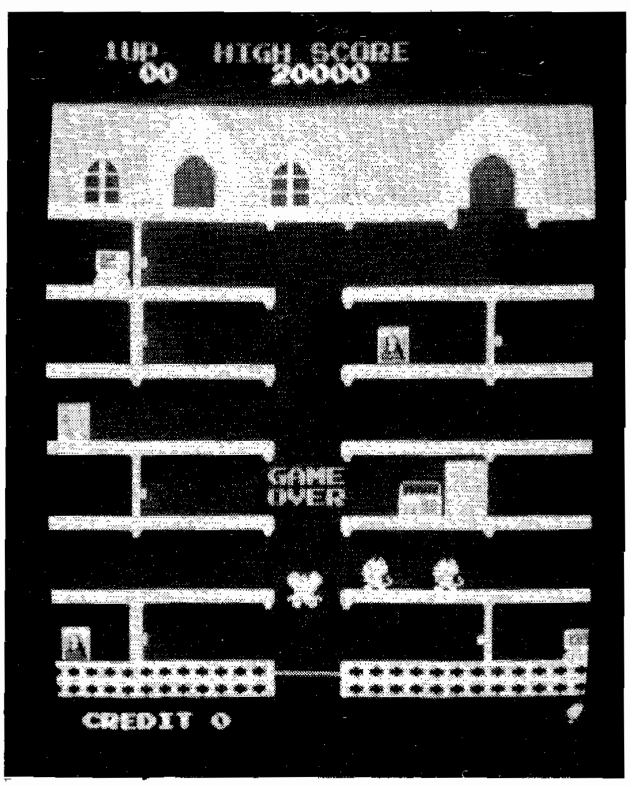


Attract Mode Display 7

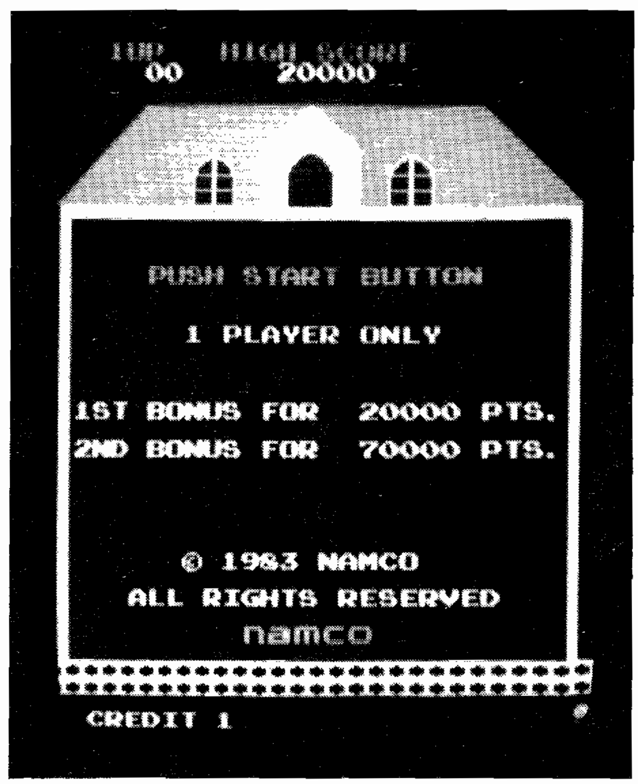


Attract Mode Display 9

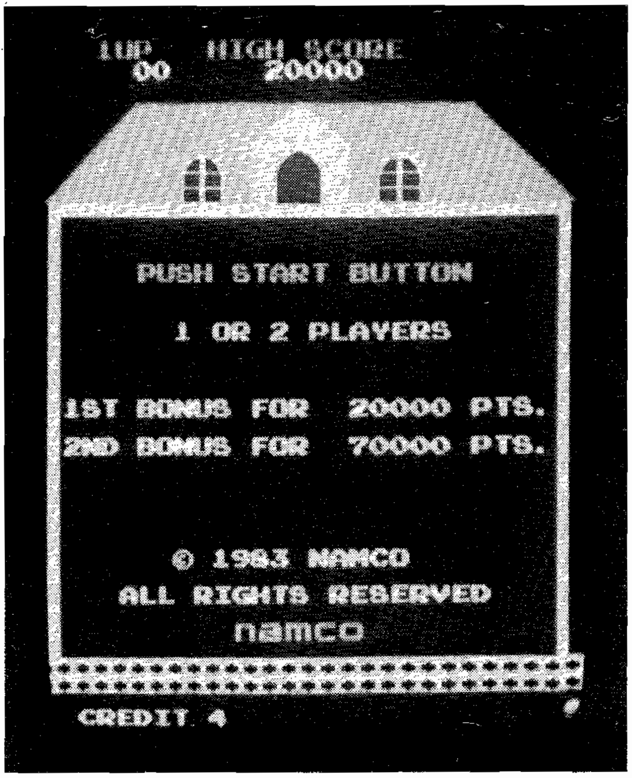
□ No matter where the game is in the Attract mode sequence, it will immediately go to the following display as soon as a game has been paid for.



Attract Mode Display 8



Ready-To-Play Mode Display 1



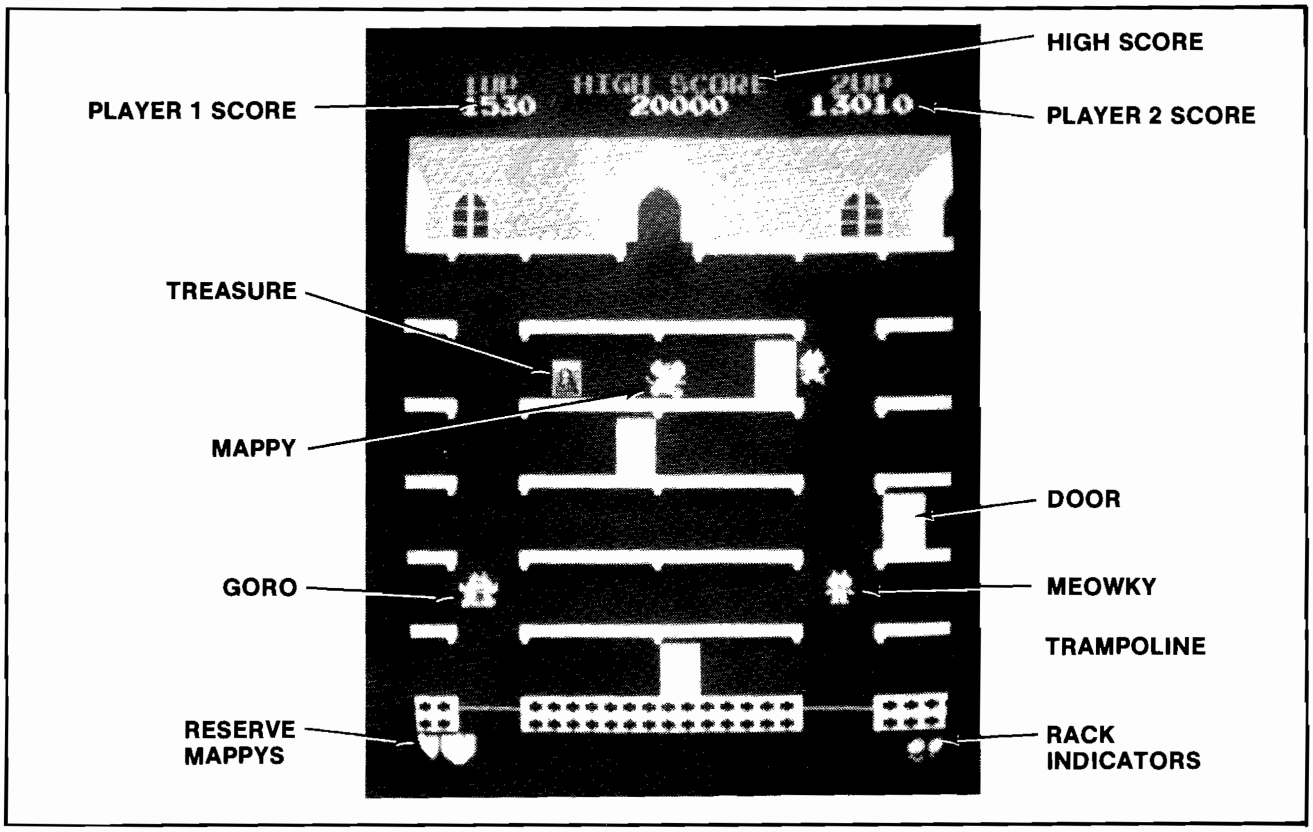
Ready-To-Play Mode Display 2

READY-TO-PLAY MODE

1. The Ready-To-Play mode starts when enough coins have been accepted for a 1 or a 2 player game.
2. The Ready-To-Play mode ends when either the "1 PLAYER" or the "2 PLAYER" push button is pressed.
3. In the Ready-To-Play mode, the game will give the above displays **centered** on the monitor screen.
4. If no START button is pressed, the displays will remain indefinitely as shown above.

PLAY MODE

1. The Play mode begins when either the "1 PLAYER" or the "2 PLAYER" start button is pressed. "PLAYER ___ READY" is displayed **centered** on the screen.
2. The Play mode ends when all of your MICE have been caught. When this happens, "GAME OVER" is written across the center of the monitor screen.
3. When playing this game, you are the MOUSE'S controlling force. It is up to you to direct him through the maze of floors and doors to gather his treasures. Your job is to develop CAT avoidance stratagies to keep him away from his pursuers (the CATS), and to give him guidance while gathering his treasures.
4. These pursuers are very sneaky and, if given half a chance, will try to corner your MOUSE at the end of one of the platforms or to trap him on one of the floors he must use to get to the treasures he's after.
5. The MOUSE'S pursuers have no defense mechanisms of any kind. But they CANNOT be PERMANENTLY eliminated either. As soon as your MOUSE puts one pursuer out of commission, another appears somewhere else on the screen.
6. However, in an emergency, your MOUSE can slow one pursuer down for short periods of time. This is accomplished by having him throw open a standard door in his pursuers face to knock him down and stun him. When hit by the door, his pursuer will be stunned for several seconds. When he is disabled like this, the MOUSE can walk right by him and not be caught. To temporarily eliminate more than one pursuer at a time, you must catch them in the radar waves emitted when opening the thick flashing doors.
7. As your skill level increases, the number and direction of pursuers coming at your MOUSE at any one time and the speed with which they move, is gradually increased; plus, their pursuit patterns become more and more devious while their overall accuracy is highly improved.
8. Bonus MICE are awarded to you periodically throughout the game as you reach or pass certain preselected point values. (These may be varied by the Owner/Operator.)
9. A Bonus Rack is awarded to you as your 3rd Rack and every 4th Rack thereafter i.e. in the 7th, 11th, 15th, 19th, etc. Racks.
10. When your MOUSE completes a Rack, the screen is cleared, the number of the next Rack is displayed in the center of the screen, the next Rack maze appears on the screen, your MOUSE appears at the bottom right hand corner of the screen, and play begins anew.
11. When the pursuers happen to catch one of your MICE, assuming you have a least one remaining in reserve, play stops, the screen is cleared, and the words "PLAYER ___ READY" "ROUND ___" appear **centered** on the monitor screen BEFORE play begins again.



Display of "On-Screen" Graphics During Game Play High Score/Initial Mode Display

12. When the pursuers catch your **last** MOUSE, the words "GAME OVER" are displayed **centered** on the monitor screen. (AT THIS POINT, SEVERAL DIFFERENT THINGS CAN HAPPEN.)

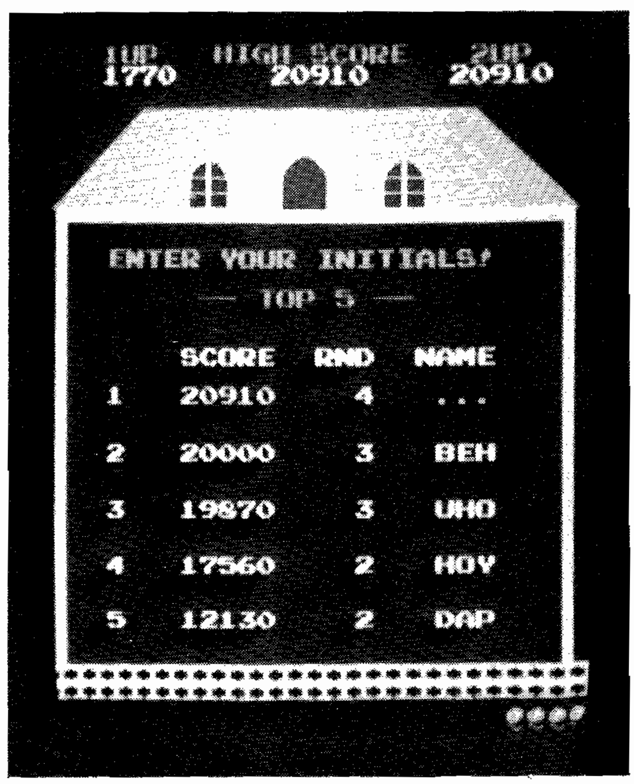
    If your score was one of the Top 5, the game will go directly to the High Score/Initial mode presentation. If your score is not high enough to cause the game to go into the High Score/Initial mode, it will either go to the Attract mode (if there are no more credits left in its memory) or into the Ready-To-Play mode (if there are still credits left in its memory.

HIGH SCORE/INITIAL MODE

In the High Score/Initial mode the game gives a display which looks like that shown at right.

When in the High Score/Initial mode, there are three "DOTS" opposite your score in the area where your initials should be.

By moving the controller stick to the right, the letters of the alphabet will appear in the place where your first initial will go and will sequence forward through it: "A", "B", "C", "D", etc. By moving the controller stick to the left, the letters can be made to sequence backward through the alphabet: "Z", "Y", "X", "W", etc.



High Score/Initial Mode Display

When you reach your initial, release the controller and push the DOOR button. Your initial is frozen in place. If you do not wish to put your initials opposite your score, just press the DOOR button three times. Three "DOTS" will appear opposite your score.

After the High Score/Initial mode, the game will either go to the Attract mode (if there are no more credits left in its memory) or into the Ready-To-Play mode (if there are still credits left in its memory).

Most of the above holds true in the "2 PLAYER" mode also. But there are a few minor differences.

TWO PLAYER OPERATION

The Upright and Cocktail Table models both have two player operation.

In the two player mode, the rules of play are the same as in the single player mode. There are some additional rules, however.

1. In the Upright models, the players must take turns at the controls.
2. In the Cocktail Table model, each player has his own set of individual controls. The picture will flip to face you when it is your turn. (When it is not your turn, your set of controls will have NO effect on the game.)
3. Your turn lasts until the pursuers catch your MOUSE. At this point, the game will do one of several things depending on whether or not the caught MOUSE was your last or if you still have others remaining in reserve.

MOUSE CAUGHT - OTHERS REMAINING IN RESERVE

- □ The GAME stops.
- □ Next, the Rack changes to the Rack number the other player is in, it displays "PLAYER ___" - "GAME START" while what's left of the other players Rack and his MOUSE appears on the screen.
- □ Play then begins for the other player.

MOUSE CAUGHT - NO OTHERS REMAINING IN RESERVE

- □ Game displays "PLAYER ___" - "GAME OVER".
- □ Next, if your score was one of the five best scores, the game will go into the High Score/Initial mode immediately.
- □ After this, the Rack changes to the Rack number the other player is in, the game will display "PLAYER ___ READY" while what's left of the other players maze and his MOUSE appear on the monitor screen. Game play then begins for the other player.
- □ If your score was not high enough to cause the game to go into the High Score/Initial mode, the game will display "PLAYER ___ READY" while what's left of the other players maze and his MOUSE appear on the monitor screen. Game play then begins for the other player.
- □ After the last player has finished his game, if his score was one of the five best scores, the game will go into the High Score/Initial mode immediately.
- □ If his score was NOT high enough to cause the game to go into the "High Score/Initial" mode, the game will either go to the Attract mode (if there are no more credits left in its memory) or into the Ready-To-Play mode (if there are still credits left in its memory).

MAPPY

OPTION SWITCH SETTINGS

DIP SWITCH A (5B)

DIFFICULTY LEVEL SETTINGS — "A" IS THE EASIEST AND "D" IS THE MOST DIFFICULT

	SW#1	**SW#2**	**SW#3**	**SW#4**	**SW#5**	**SW#6**	**SW#7**	**SW#8**
DIFFICULTY LEVEL* "A" EASY	OFF	OFF	NOT	NOT	NOT			
"B"	ON	OFF	USED	USED	USED			
"C"	OFF	ON	**MUST**	**MUST**	**MUST**			
"D" MOST	ON	ON	**BE**	**BE**	**BE**			
DIFFICULT			**OFF!**	**OFF!**	**OFF!**			

GAME SOUNDS

	SW#1	**SW#2**	**SW#3**	**SW#4**	**SW#5**	**SW#6**	**SW#7**	**SW#8**
* GAME PROVIDES SOUND			NOT	NOT	NOT	OFF		
IN **ATTRACT MODE**			USED	USED	USED	ON		
GAME **DOES NOT** PROVIDE SOUND			**MUST**	**MUST**	**MUST**			
IN **ATTRACT MODE**			**BE**	**BE**	**BE**			
			OFF!	**OFF!**	**OFF!**			

ROUND CHANGE

	SW#1	**SW#2**	**SW#3**	**SW#4**	**SW#5**	**SW#6**	**SW#7**	**SW#8**
* NORMAL OPERATION			NOT	NOT	NOT		OFF	
RACK ADVANCE			USED	USED	USED		ON	
			MUST	**MUST**	**MUST**			
			BE	**BE**	**BE**			
			OFF!	**OFF!**	**OFF!**			

FREEZE VIDEO

	SW#1	**SW#2**	**SW#3**	**SW#4**	**SW#5**	**SW#6**	**SW#7**	**SW#8**
* MONITOR OPERATES NORMALLY			NOT	NOT	NOT			OFF
FREEZE VIDEO (MONITOR PRESENTATION STOPS MOVING)			USED	USED	USED			ON
			MUST	**MUST**	**MUST**			
			BE	**BE**	**BE**			
			OFF!	**OFF!**	**OFF!**			

*INDICATED FACTORY RECOMMENDED SETTINGS FOR THESE SWITCHES

PART NO. **M051-00353-A007**

MAPPY

OPTION SWITCH SETTINGS

DIP SWITCH B (5E)

COINS PER CREDIT — COIN SWITCH NUMBER 1

	SW#1	SW#2	SW#3	SW#4	SW#5	SW#6	SW#7	SW#8
* 1 COIN 1 CREDIT	OFF	OFF	OFF					
1 COIN 2 CREDITS	ON	OFF	OFF					
1 COIN 3 CREDITS	OFF	ON	OFF					
1 COIN 6 CREDITS	ON	ON	OFF					
2 COINS 1 CREDIT	OFF	OFF	ON					
2 COINS 3 CREDITS	ON	OFF	ON					
3 COINS 1 CREDIT	OFF	ON	ON					
3 COINS 2 CREDITS	ON	ON	ON					

BONUS SHIPS AWARDED AT THE FOLLOWING POINT VALUES:

BEGAN WITH 1, 2 OR 3 MAPPY'S	**BEGAN WITH 5 MAPPY'S**	SW#1	SW#2	SW#3	SW#4	SW#5	SW#6	SW#7	SW#8
1st MAPPY 20000* 2nd MAPPY 70000	ONE MAPPY 30000 2nd MAPPY 80000				OFF	OFF	OFF		
1st MAPPY 20000 2nd MAPPY 60000	1st MAPPY 30000 2nd MAPPY 100000				ON	OFF	OFF		
1st MAPPY 20000 2nd MAPPY 80000	1st MAPPY 30000 2nd MAPPY 120000				OFF	ON	OFF		
1st MAPPY 30000 2nd MAPPY 100000	1st MAPPY 30000 **ONLY**				ON	ON	OFF		
1st MAPPY 20000 **ONLY**	1st MAPPY 40000 **ONLY**				OFF	OFF	ON		
1st MAPPY 20000 and EVERY 70000	1st MAPPY 30000 and EVERY 100000				ON	OFF	ON		
1st MAPPY 20000 and EVERY 80000	1st MAPPY 40000 and EVERY 120000				OFF	ON	ON		
NO BONUS MAPPY'S GIVEN WITH THIS SETTING					ON	ON	ON		

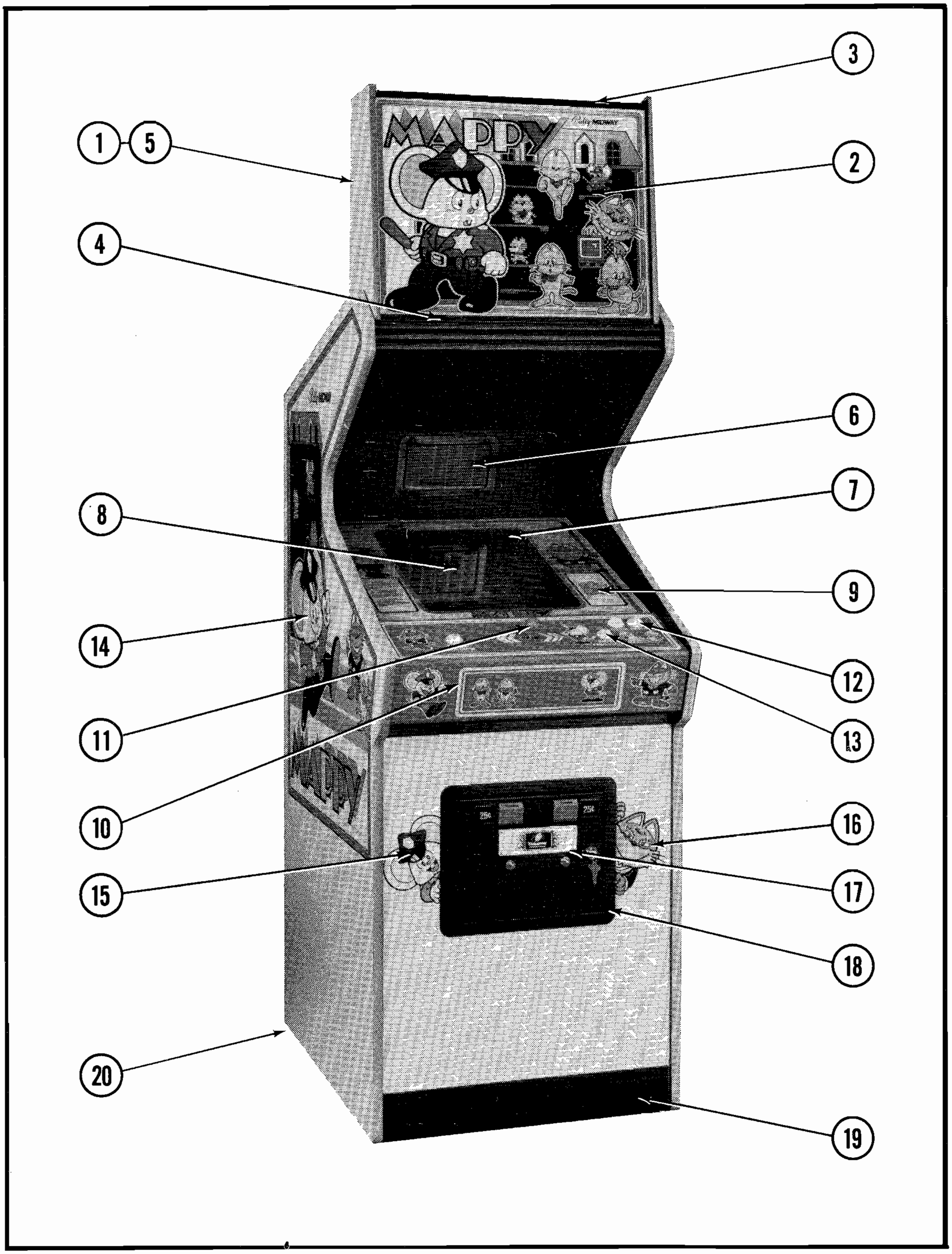
DETERMINES NUMBER OF SPACE FIGHTERS PLAYER BEGINS GAME WITH:

	SW#1	SW#2	SW#3	SW#4	SW#5	SW#6	SW#7	SW#8
* 3 MAPPY'S							OFF	OFF
5 MAPPY'S							ON	OFF
1 MAPPY							OFF	ON
2 MAPPY'S							ON	ON

*INDICATED FACTORY RECOMMENDED SETTINGS FOR THESE SWITCHES	PART NO. **M051-00353-A007**

II. Illustrated Parts Breakdown

NO. 353 - MAPPY - UPRIGHT - FRONT

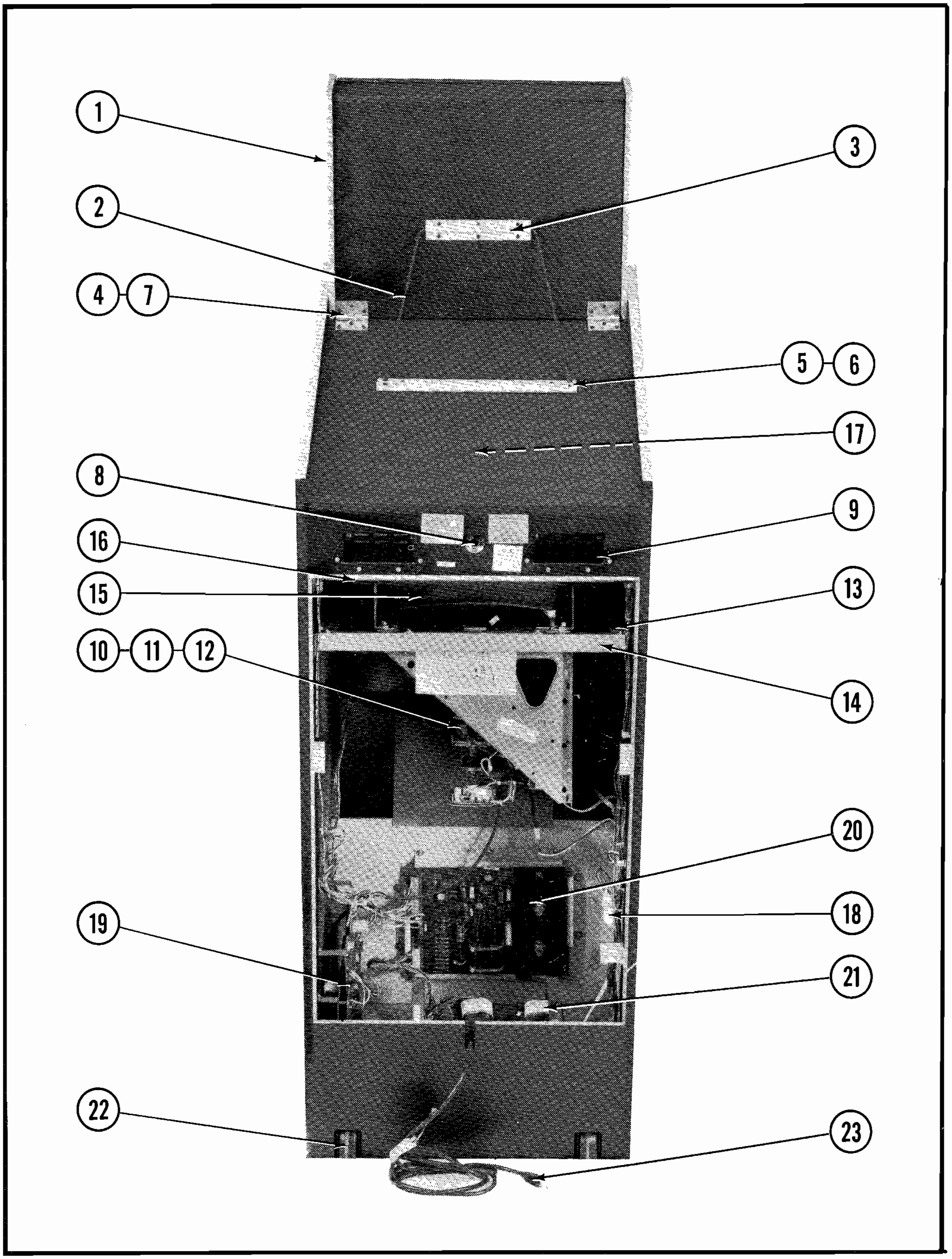


NO. 353 - MAPPY - UPRIGHT - FRONT - PARTS LIST

*ORDER BY PART NUMBER **ONLY***

ITEM	PART NO.	DESCRIPTION
1	A353-00011-0000	HEADER ASSY.
2	0353-00901-00XF	HEADER - 17-7/16"x21⅞"
3	0353-00103-00XF	HEADER RETAINER - UPPER
4	A353-00014-00XF	HEADER RETAINER ASSY. - LOWER
	0017-00101-0138	#8-⅝ TORX TAMPER RESISTANT SCR. (6 REQ'D.)
5	A353-00021-0000	FLUOR. HEADER LIGHT ASSY. (2 REQ'D.)
6	0017-00009-0393	BLACK SPEAKER GRILL W/SLOTS
	0017-00003-0259	6"x9" SPEAKER - 8 OHM, 8W.
	0017-00101-0127	#8-32x1½ CARRIAGE BOLT (4 REQ'D.)
	0017-00103-0061	#8-32 HEX NUT W/SEMS (4 REQ'D.)
7	0508-00900-0000	T.V. BEZEL
8	0508-00905-0000	PLEXI-DIFFUSER
	0508-00901-0000	PLEXI-GLASS CLIPS (4 REQ'D.)
	0017-00101-0017	#6x½ BLK. SLT. HEX HD. SCREW (4 REQ'D.)
9	0353-00902-00XF	MAIN VIEWING GLASS
	0508-00108-0000	GLASS STOP BRKT.
	0017-00101-0017	#8x¾ SLT. HEX HD. M.S. (3 REQ'D.)
10	A353-00019-0000	OVERLAY - CONTROL SHELF PLATE ASSY.
	A353-00018-0000	CONTROL SHELF PLATE WELD ASSY.
	0353-00903-0000	DECORATIVE OVERLAY
	0353-00107-0100	CONTROL SHELF MTG. BRKT. - RIGHT
	0353-00107-0200	CONTROL SHELF MTG. BRKT. - LEFT
	0555-00901-0000	PLASTIC LOCATING PIN (4 REQ'D.)
	0017-00009-0534	BASSICK CLAMP (3 REQ'D.)
	0017-00101-0141	#8x11/16 UNSLOT. HEX HD. SCR. (10 REQ'D.)
	0353-00906-0000	CONTROL SHELF STRAP
11	A353-00015-0000	CONTROL ASSEMBLY
	A353-00006-0000	CONTROL SHELF CABLE ASSY.
12	0017-00042-0260	PUSH BUTTON ASSY. - WHITE (2 REQ'D.)
13	0017-00042-0257	PUSH BUTTON ASSY. - YELLOW (2 REQ'D.)
	0017-00032-0093	PUSH BUTTON SWITCH W/HOLDER (4 REQ'D.)
	0017-00103-0054	⅝-11 PAL NUT (4 REQ'D.)
14	0353-00905-0200	DECAL-LEFT SIDE
	0353-00905-0100	DECAL - RIGHT SIDE (NOT SEEN)
15	0353-00904-0100	DECAL - FRONT
16	0353-00904-0200	DECAL - FRONT
17	A090-00300-11BK	U.S.A. 25¢ DOUBLE COIN DOOR ASSY.
	A982-00015-0000	COIN DOOR CABLE ASSY.
18	0090-00002-04BK	LARGE COIN DOOR FRAME
	0017-00101-0121	#6-32x5/16 PHIL. TRS. HD. SCR. (3 REQ'D.)
19	0935-00906-0100	KICK PLATE - 23" LG.
20	0017-00102-0048	⅜-16x2" LEG LEVELERS (4 REQ'D.)
	0017-00103-0026	⅜-16 LEG LEVELER HEX NUTS (4 REQ'D.)

NO. 353 - MAPPY - UPRIGHT - REAR



NO. 353 - MAPPY - UPRIGHT - REAR - PARTS LIST

ORDER BY PART NUMBER ***ONLY***

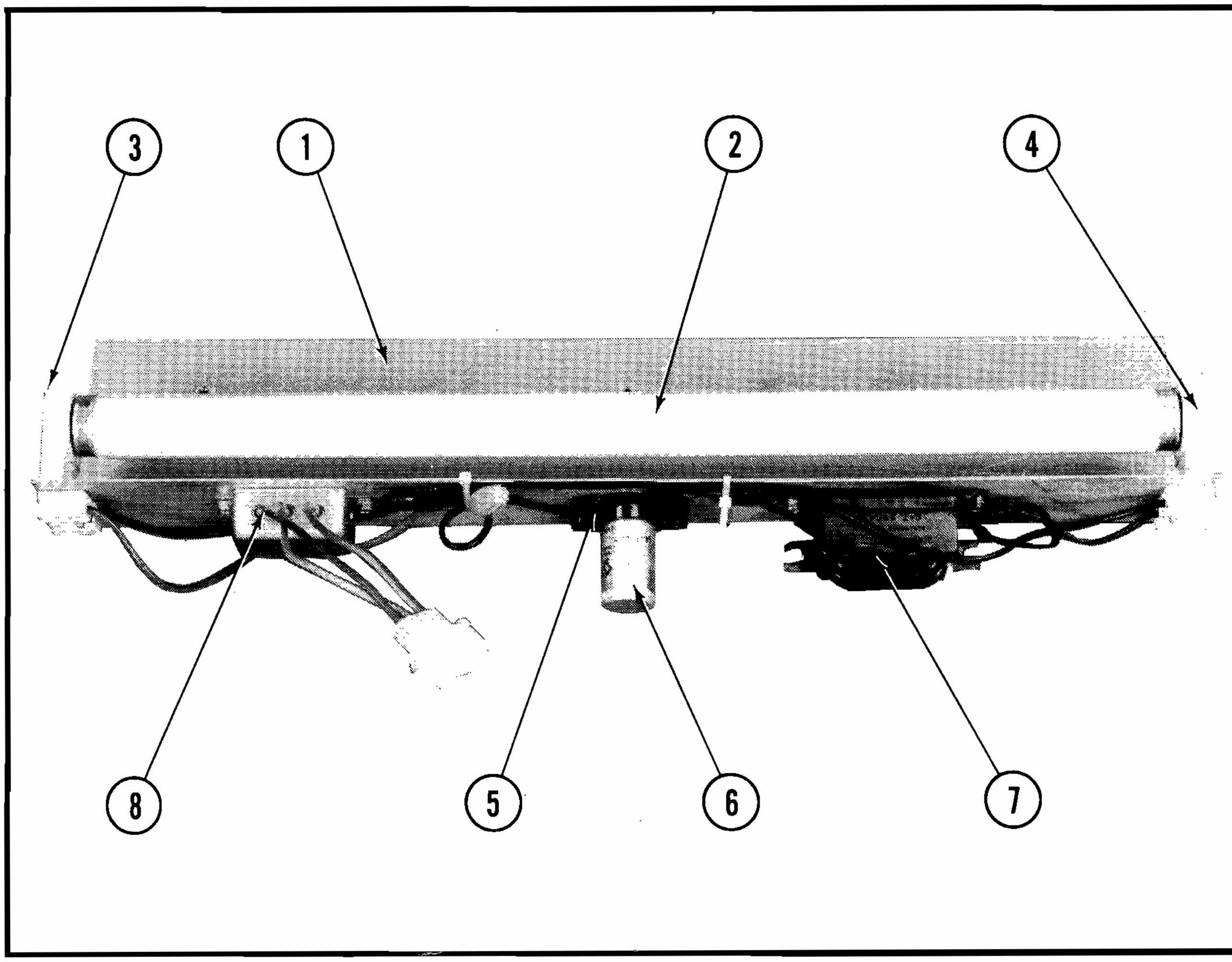
ITEM	PART NO.	DESCRIPTION
1	A353-00011-0000	HEADER ASSY.
2	0353-00110-0000	HEADER SUPPORT BRACE
3	0353-00102-0000	SUPPORT ARM BRACKET
4	0017-00009-0545	SUPPORT HINGE (2 REQ'D.)
5	0353-00109-0000	POSITIONING BRKT.
6	0017-00101-0138	#8x⅝ TORX TAMPER RESISTANT SCR. (22 REQ'D.)
7	0017-00101-0149	#10x1⅜ TORX TAMPER RESISTANT SCR. (2 REQ'D.)
	0017-00104-0011	#10 EXT. STAR WASHER (2 REQ'D.)
	0017-00104-0039	#10 FLAT WASHER (2 REQ'D.)
8	A945-00038-0000	ON-OFF SWITCH & PLATE ASSY.
9	0894-00916-0000	PLASTIC PULL & VENT (2 REQ'D.)
	0017-00101-0141	#8x11/16 UNSLOT. HEX HD. M.S. (8 REQ'D.)
10	0017-00003-0339	ELECTROHOME - 19" COLOR DUAL SYNC. HORIZ. MTG. MONITOR (OR)
11	0017-00003-0439	WELLS-GARDNER - 19" COLOR DUAL SYNC. HORIZ. MTG. MONITOR (OR)
12	0017-00003-0454	ZENITH - 19" COLOR DUAL SYNC. HORZ. MTG. MONITOR
13	0349-00101-0000	MONITOR RAIL (2 REQ'D.)
	0555-00901-0000	PLASTIC LOCATING PIN (4 REQ'D.)
	0017-00101-0141	#8x11/16 UNSLOT HEX HD. M.S. (8 REQ'D.)
14	0349-00100-0000	MONITOR MTG. ANGLE BRKT. (2 REQ'D.)
	0017-00101-0144	#10-24x⅝ SLT. HEX W/WASHER SCR. (4 REQ'D.)
	0017-00101-0082	#10x¾ UNSLOT HEX HD. BOLT (4 REQ'D.)
	0017-00104-0011	#10 EXT. WASHER (4 REQ'D.)
15	0508-00900-0000	19" T.V. BEZEL
	0508-00106-0000	BEZEL MTG. BRKT.
16	0508-00108-0000	GLASS STOP BRKT.
	0017-00101-0027	#8x¾ SLT. HEX HD. M.S. (3 REQ'D.)
17	0017-00003-0259	6"x9" SPEAKER - 8 OHM, 8W.
18	A088-00016-0000	INTELOCK SWITCH & SPRING BRKT. ASSY.
19	A353-00004-0000	CARD RACK ASSY. W/BOARDS
	A084-91476-A316	F.C.C FILTER P.C. BRD. ASSY.
	A084-91479-C353	CPU P.C. BOARD ASSY.
	A084-91480-C353	VIDEO P.C. BOARD ASSY.
	0361-00101-0000	TIE DOWN BRKT (2 REQ'D.)
	0361-00102-0000	SUPPORT BRKT. (2 REQ'D.)
	0017-00101-0124	#6x¼ UNSLOT. HEX HD. SCREW (2 REQ'D.)
20	A082-90427-A000	POWER SUPPLY P.C.B. ASSY. - 70VA.
	0624-00902-0100	P.C. SUPPORT BRKT. - 12" LG. (2 REQ'D.)
	0624-00902-0500	P.C. SUPPORT BRKT. - 6½" LG. (2 REQ'D.)
	0317-00102-0000	P.C. MTG. BRACE BRKT. (4 REQ'D.)
	0017-00101-0141	#8x11/16 UNSLOT HEX HD. M.S. (10 REQ'D.)
	0017-00104-0037	#8 FLAT WASHER (10 REQ'D.)
21	A945-00036-0002	POWER CHASSIS ASSY. - 70VA., 115V.
22	A961-00007-0000	CASTER ASSEMBLY (2 REQ'D.)
	0961-00109-0000	WHEEL BRKT. (2 REQ'D.)
	0017-00042-0255	PLASTIC WHEEL (2 REQ'D.)
	0894-00702-00XF	SHAFT (2 REQ'D.)
	0017-00100-0037	⅜" E-RING (2 REQ'D.)
23	A945-00019-0000	LINE CORD ASSY.

NO. 353 - MAPPY - UPRIGHT - REAR - PARTS LIST (Cont'd)

ORDER BY PART NUMBER ***ONLY***

ITEM	PART NO.	DESCRIPTION
		ADDITIONAL PARTS LIST
	A950-00004-0000	COIN BOX ASSEMBLY
	A950-00006-0100	WIRE COIN BOX CRADLE ASSY.
	0950-00105-0000	COIN BOX COVER
	0950-00104-0000	COIN BOX HANDLE
	0950-00101-0000	COIN DEFLECTOR (2 REQ'D.)
	0950-00900-0000	LARGE PLASTIC COIN BOX
	A097-00009-0000	BACK DOOR LOCK ASSY.
	0017-00009-0490	5⅝ SQR. VENT GRILL (4 REQ'D.)
	A353-00008-0000	MASTER CABLE W/BRKT. ASSY.
	A353-00010-0000	HIGH VOLTAGE CABLE ASSY.
	A316-00010-0000	LOW VOLTAGE CABLE ASSY.
	A508-00034-0000	AUDIO ADAPTOR CABLE ASSY.
	A508-00035-0000	VIDEO ADAPTOR CABLE ASSY.
	A508-00024-0000	SIGNAL CABLE ASSY.

NO. 353 - MAPPY - UPRIGHT - HEADER FLUORESCENT LIGHT ASSY.

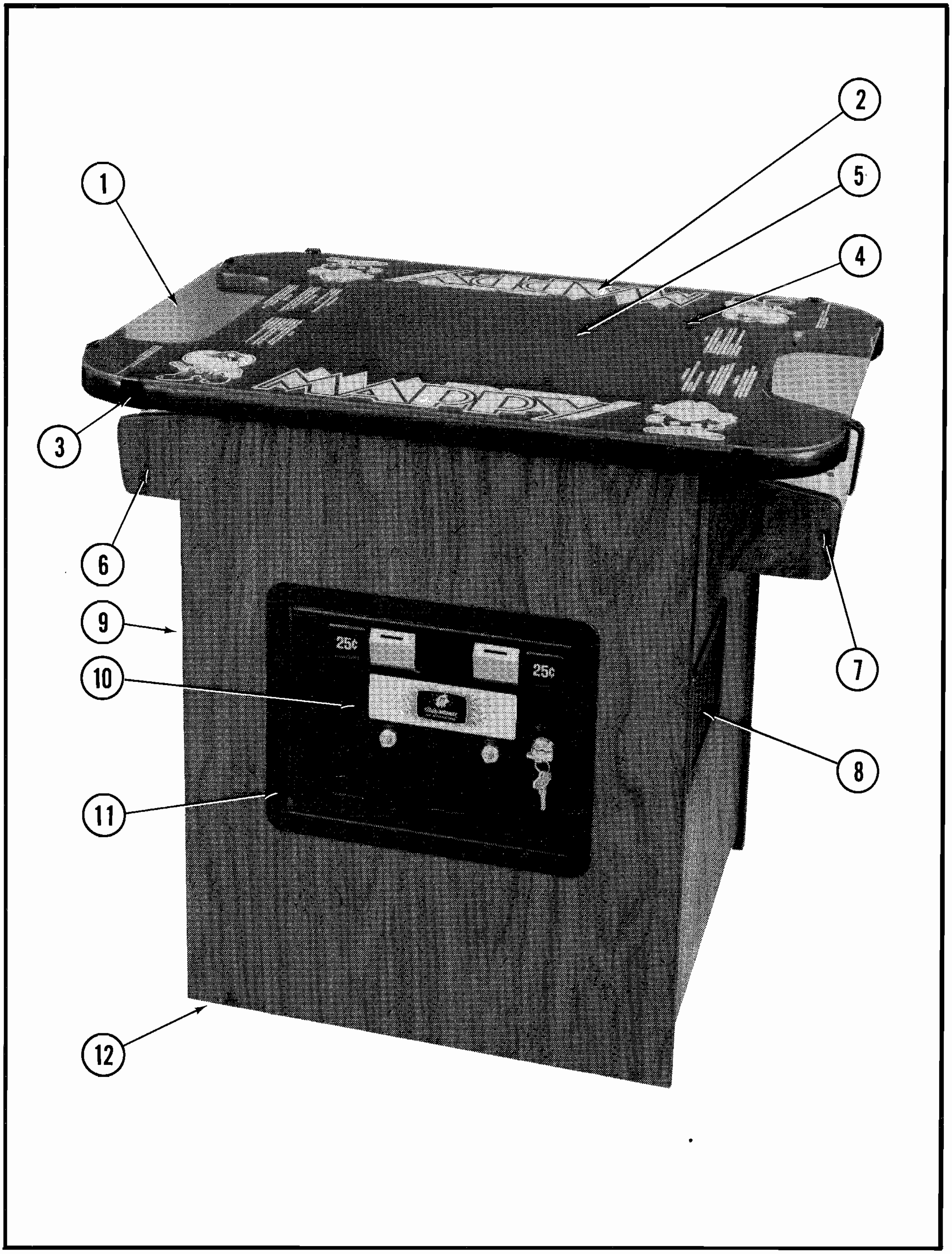


NO. 353 - MAPPY - UPRIGHT - HEADER FLUORESCENT LIGHT ASSY. - PARTS LIST

*ORDER BY PART NUMBER **ONLY***

ITEM	PART NO.	DESCRIPTION
1	0353-00113-0000	FLUORESCENT BRKT.
2	0017-00003-0043	18" COOL WHITE FLUORESCENT LAMP
3	0017-00003-0445	LAMP LOCKS (2 REQ'D.)
4	0017-00031-0036	FLUORESCENT SOCKET (2 REQ'D.)
5	0017-00003-0412	FLUORESCENT STARTER HOLDER W/LEADS
	0017-00101-0573	#6-32 x 1/2 PHIL. RND. HD. M.S. (4 REQ'D.)
	0017-00104-0009	#6 EXT. WASHER (4 REQ'D.)
6	0017-00003-0019	FLUORESCENT STARTER
7	0017-00003-0026	BALLAST
	0017-00101-0598	#8-32 x 5/16 SLT. HEX HD. SCR. (4 REQ'D.)
8	A961-00042-0000	LINE FILTER ASSY.

NO. 361 - MAPPY - COCKTAIL - FRONT

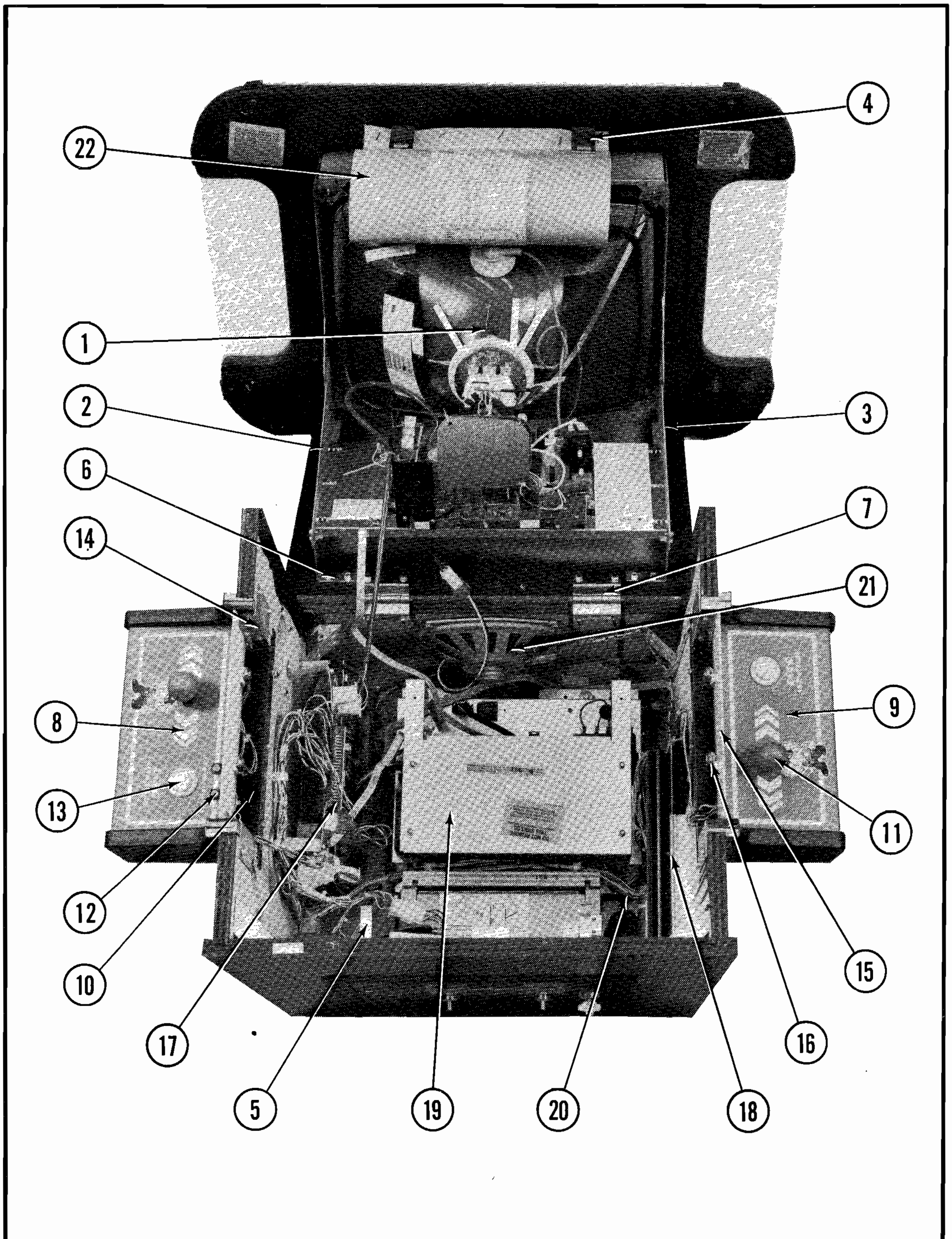


NO. 361 - MAPPY - COCKTAIL - FRONT - PARTS LIST

*ORDER BY PART NUMBER **ONLY***

ITEM	PART NO.	DESCRIPTION
1	0017-00009-0499	COVER GLASS — 32" x 22" x 1/4"
2	0361-00900-0000	DECORATIVE ARTWORK UNDERLAY
3	0775-00104-00XF	GLASS CLIPS (8 REQ'D.)
	0017-00101-0117	#8 x 5/8 BLK. PHIL. TRS. HD. SCR. (8 REQ'D.)
4	0557-00900-0000	T.V. BEZEL
5	0508-00905-0000	DIFFUSER
	0508-00901-0000	PLEXI-GLASS CLIPS (4 REQ'D.)
	0017-00101-0017	#6 x 1/2 SLT. HEX HD. SCR. (4 REQ'D.)
6	A361-00004-0100	CONTROL SHELF ASSY. — PLAYER #1
7	A361-00004-0200	CONTROL SHELF ASSY. — PLAYER #2
8	0017-00009-0393	BLACK SPEAKER GRILL W/SLOTS (2 REQ'D.)
9	0017-00009-0482	SPEAKER GRILL (NOT SEEN)
	0017-00003-0187	6" x 9" SPEAKER — 8 OHM, 9W.
	0017-00101-0136	#8-32 x 1-1/4 CARRIAGE BOLT (8 REQ'D.)
	0017-00101-0127	#8-32 x 1-1/2 CARRIAGE BOLT (4 REQ'D.)
	0017-00103-0061	#8-32 HEX NUT W/SEMS (12 REQ'D.)
10	A090-00300-11BK	U.S.A. 25¢ DOUBLE COIN DOOR ASSY.
	A982-00015-0000	COIN DOOR CABLE ASSY.
11	0090-00002-04BK	LARGE COIN DOOR FRAME
	0017-00101-0121	#6-32 x 5/16 PHIL. TRS. HD. SCR. (3 REQ'D.) (MOUNTS COIN DOOR TO FRAME)
	A927-00019-0000	COIN BOX ASSEMBLY
	A962-00004-0000	COIN BOX COVER ASSY.
	A962-00005-0000	COIN BOX SIDE CHANNEL ASSY. — SHORT
	0962-00101-0000	COIN BOX SIDE CHANNEL — SHORT
	0017-00101-0628	#8-32 x 3/4 CARRIAGE BOLT (4 REQ'D.)
	0017-00104-0022	#8 FLAT WASHER (4 REQ'D.)
	0017-00103-0061	#8-32 HEX NUT W/SEMS (4 REQ'D.)
12	0017-00102-0048	3/8-16 x 2" LEG LEVELERS (4 REQ'D.)
	0017-00103-0026	3/8-16 LEG LEVELER HEX NUTS (4 REQ'D.)

NO. 361 - MAPPY - COCKTAIL - INTERIOR ACCESS



NO. 361 - MAPPY - COCKTAIL - INTERIOR ACCESS - PARTS LIST

ORDER BY PART NUMBER ***ONLY***

ITEM	PART NO.	DESCRIPTION
1	0017-00003-0339	ELECTROHOME — 19" COLOR DUAL SYNC HORIZ. MTG. MONITOR (OR)
1	0017-00003-0439	WELLS-GARDNER - 19" COLOR DUAL SYNC HORIZ. MTG. MONITOR (OR)
1	0017-00003-0454	ZENITH - 19" COLOR DUAL SYNC HORIZ. MTG. MONITOR
2	A515-00019-0000	MONITOR SUPPORT ASSY. - LEFT
3	A515-00019-0100	MONITOR SUPPORT ASSY. - RIGHT
	0017-00101-0109	#8x5/16 UNSLOT. HEX HD. BOLT (6 REQ'D.)
4	0610-00132-00ZN	STRIKE (2 REQ'D.)
5	0017-00009-0534	BASSICK CLAMP (2 REQ'D.)
	0017-00101-0141	#8x11/16 UNSLOT HEX HD. M.S. (8 REQ'D.)
6	0927-00101-00XF	SUPPORT ANGLE (2 REQ'D.)
	0017-00101-0598	#8-32x5/16 SLT. HEX HD. SCREW (4 REQ'D.)
7	0017-00009-0514	2½" HINGE (2 REQ'D.)
	0017-00101-0136	#8-32x1¼ CARRIAGE BOLT (8 REQ'D.)
	0017-00103-0061	#8-32 HEX NUT W/SEMS (8 REQ'D.)
8	0361-00901-0100	DECORATIVE OVERLAY - PLAYER #1
9	0361-00901-0200	DECORATIVE OVERLAY - PLAYER #2
	A361-00011-0000	CONTROL PANEL WELDMENT ASSY. (2 REQ'D.)
10	0510-00101-00XF	BOTTOM PAN (2 REQ'D.)
	0017-00101-0341	#6x¼ PHIL. TRS. HD. SCR. (6 REQ'D.)
11	A353-00015-0000	CONTROL ASSEMBLY (2 REQ'D.)
	A361-00005-0100	CONTROL SHELF CABLE ASSY. - PLAYER #1
	A361-00005-0200	CONTROL SHELF CABLE ASSY. - PLAYER #2
12	0017-00032-0106	PUSH BUTTON (2 REQ'D.)
13	0017-00042-0257	PUSH BUTTON ASSY. - YELLOW
	0017-00032-0093	PUSH BUTTON SWITCH W/HOLDER
	0017-00103-0054	⅝-11 PAL NUT
14	0930-00104-0000	CONTROL PANEL LOCATING BRKT. (4 REQ'D.)
	0017-00101-0025	#8x½ SLT. HEX HD. M.S. (16 REQ'D.)
15	0930-00904-0000	LIGHT SHIELD (2 REQ'D.)
16	0017-00031-0044	WEDGE BASE LAMP SOCKET (4 REQ'D.)
	0017-00003-0219	#194 WEDGE LAMP - 14V., 27A. (4 REQ'D.)
	0017-00101-0555	#6-32x5/16 SLT. HEX HD. M.S. (4 REQ'D.)
17	A353-00004-0000	CARD RACK ASSY. W/BOARDS
	A084-91476-A316	F.C.C. FILTER P.C. BRD. ASSY.
	A084-91479-C353	CPU P.C. BOARD ASSY.
	A084-91480-C353	VIDEO P.C. BOARD ASSY.
	0361-00502-0000	CARD RACK SUPPORT BASE
	0017-00101-0033	#8x1¼ SLT. HEX HD. SCR. (2 REQ'D.)
18	A082-90427-A000	POWER SUPPLY P.C. BOARD ASSY.
	0624-00902-0100	P.C. SUPPORT BRKT. - 12" LG.
	0624-00902-0500	P.C. SUPPORT BRKT. - 6½" LG. (2 REQ'D.)
	0317-00102-0000	P.C. MTG. BRACE BRKT. (4 REQ'D.)
	0017-00101-0141	#8x11/16 UNSLOT HEX HD. M.S. (10 REQ'D.)
	0017-00104-0037	#8 FLAT WASHER (10 REQ'D.)
19	A945-00036-0000	POWER CHASSIS ASSY. - 70VA., 115V.

NO. 361 - MAPPY - COCKTAIL - INTERIOR ACCESS - PARTS LIST (Cont'd)

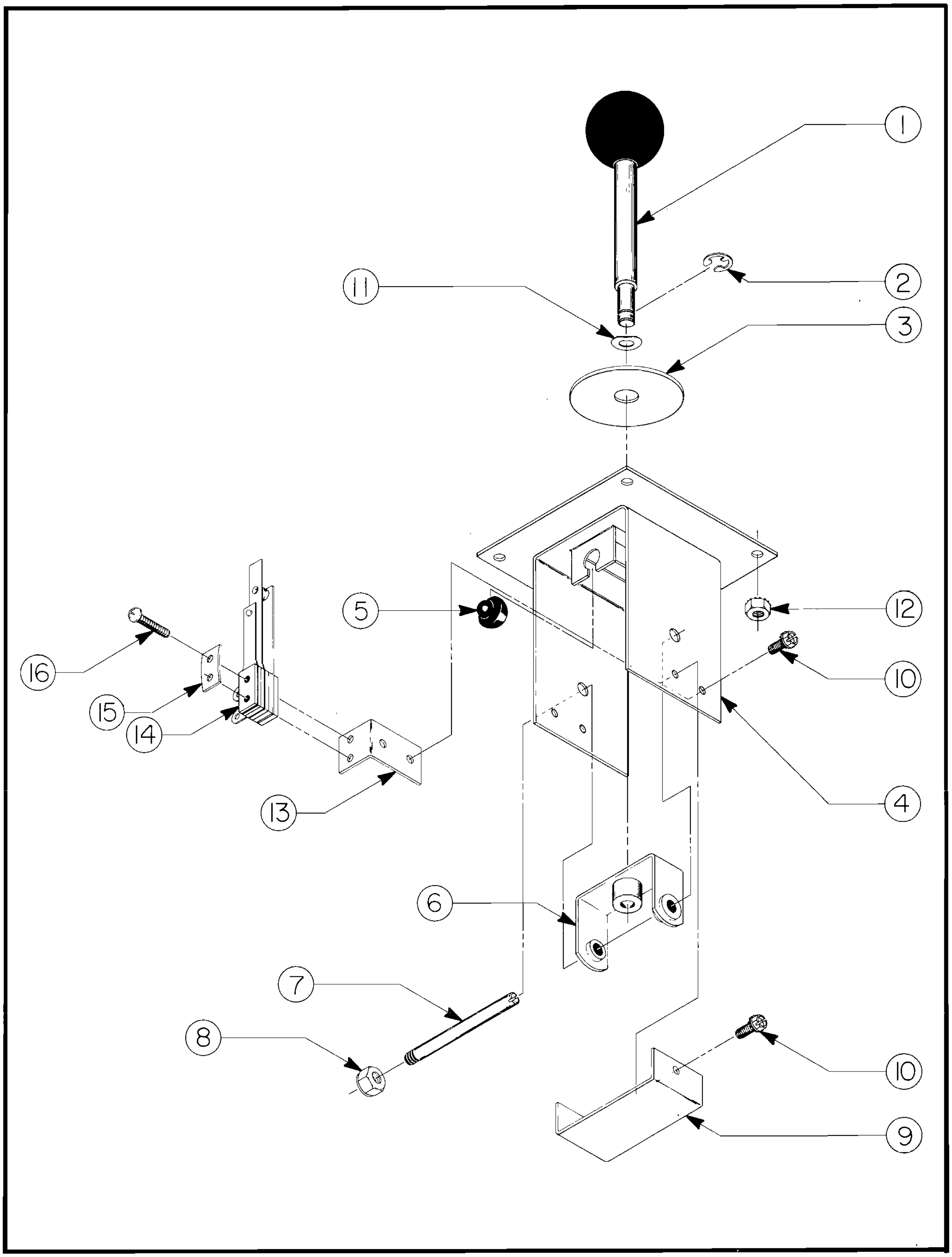
*ORDER BY PART NUMBER **ONLY***

ITEM	PART NO.	DESCRIPTION
20	A775-00013-0000	FAN ASSY.
	0017-00003-0222	4" MUFFIN FAN
	0775-00110-00XF	FAN PLATE
	0749-00106-00XF	VENT SCREEN
	0017-00101-0347	#6-32x½" R.H.M.S. (4 REQ'D.)
	0017-00104-0009	#6 EXT. WASHER (4 REQ'D.)
	0017-00103-0005	#6-32 HEX NUT (4 REQ'D.)
	0017-00101-0026	#8x⅝ SLT. HEX HD. SCREW (4 REQ'D.)
21	0017-00003-0187	6"x9" SPEAKER - 8 OHM, 9W.
22	0942-00902-0000	MONITOR SHIELD
		ADDITIONAL PARTS LIST
	A088-00018-0000	INTERLOCK SWITCH & BRKT. ASSY.
	A945-00038-0000	ON-OFF SWITCH & PLATE ASSY.
	A361-00007-0000	MASTER CABLE W/BRKT. ASSY. & VIDEO
	A316-00010-0000	LOW VOLTAGE CABLE ASSY.
	A317-00006-0000	HIGH VOLTAGE CABLE ASSY.
	A510-00014-0000	MONITOR SIGNAL CABLE ASSY.
	A508-00034-0000	AUDIO ADAPTOR CABLE ASSY.
	A508-00035-0000	VIDEO ADAPTOR CABLE ASSY.
	A927-00005-0000	HIGH BASE LEG KIT ASSY. - OPTIONAL

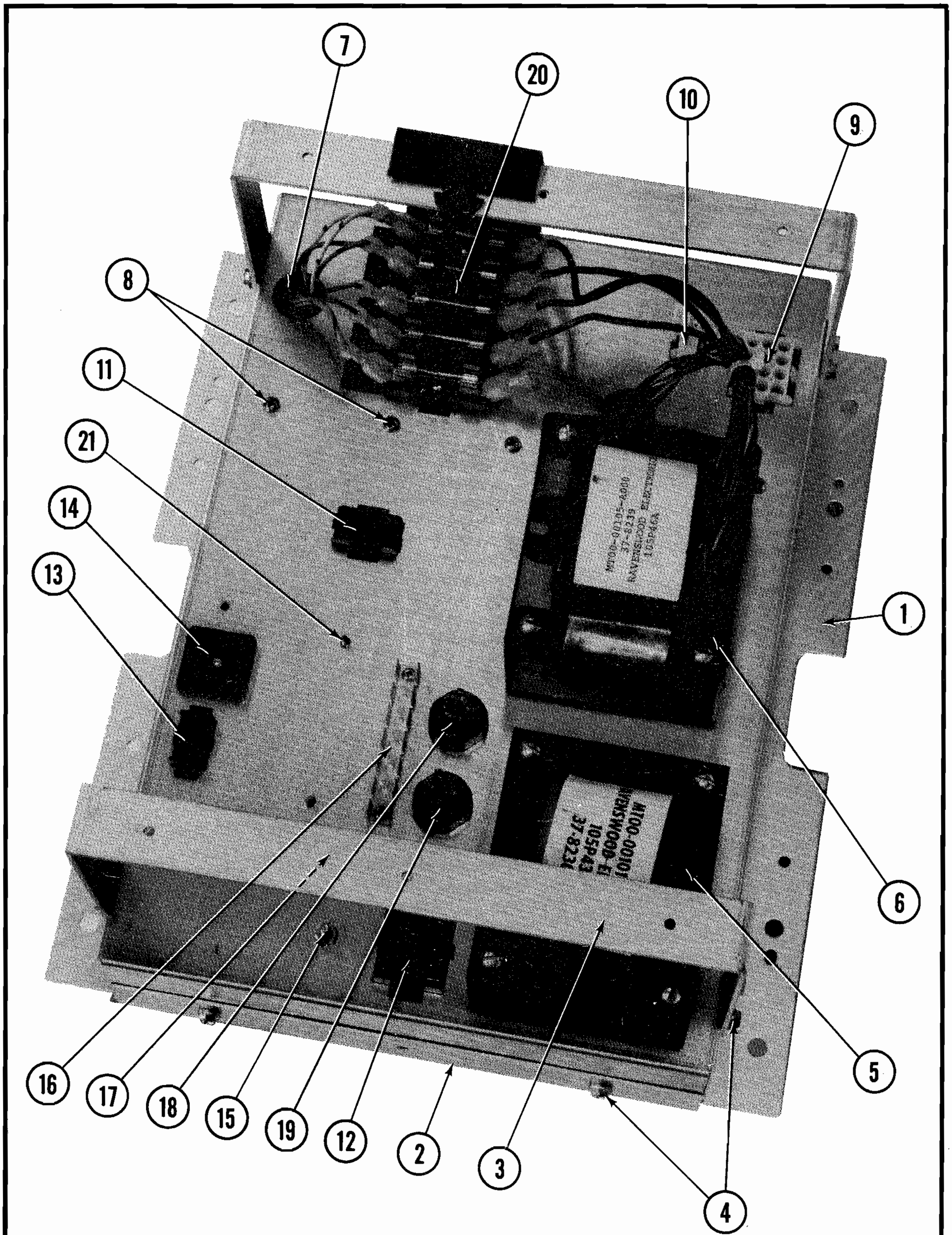
MAPPY - CONTROL ASSY. UPRIGHT & COCKTAIL - PARTS LIST

*ORDER BY PART NUMBER **ONLY***

ITEM	PART NO.	DESCRIPTION
1	A866-00207-0000	MOLDED 1⅜" DIA. BALL & SHAFT ASSY.
2	0017-00100-0025	¼" E-RING
3	0852-00106-0000	FOLLOWER PLATE
4	A353-00016-0000	TOP PLATE TO MAIN CONTROL BRKT. ASSY.
5	0017-00041-0616	RUBBER BUPPER - 90 DUROMETER (2 REQ'D.)
6	A866-00027-0000	PIVOT BRKT. HUB & BEARING ASSY.
7	0852-00701-00XF	PIVOT PIN
8	0017-00103-0011	#10-32 LOCK NUT
9	0508-00112-00XF	BRACE-MAIN BRKT.
10	0017-00101-0555	#6-32x5/16 SLT. HEX HD. M.S. (4 REQ'D.)
11	0017-00104-0116	SPRING WASHER
12	0017-00103-0061	#8-32 LOCK NUT W/SEMS (4 REQ'D.)
13	0353-00108-0000	SWITCH BRKT. (2 REQ'D.)
14	A353-00020-0000	LEAF SWITCH ASSY. (2 REQ'D.)
15	0020-00202-0000	SWITCH PLATE (2 REQ'D.)
16	0017-00101-0527	#5-40x⅝ PHIL. RND. HD. M.S. (4 REQ'D.)


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MAPPY - POWER CHASSIS ASSY. - 70VA, 115V. - ALL VERSIONS

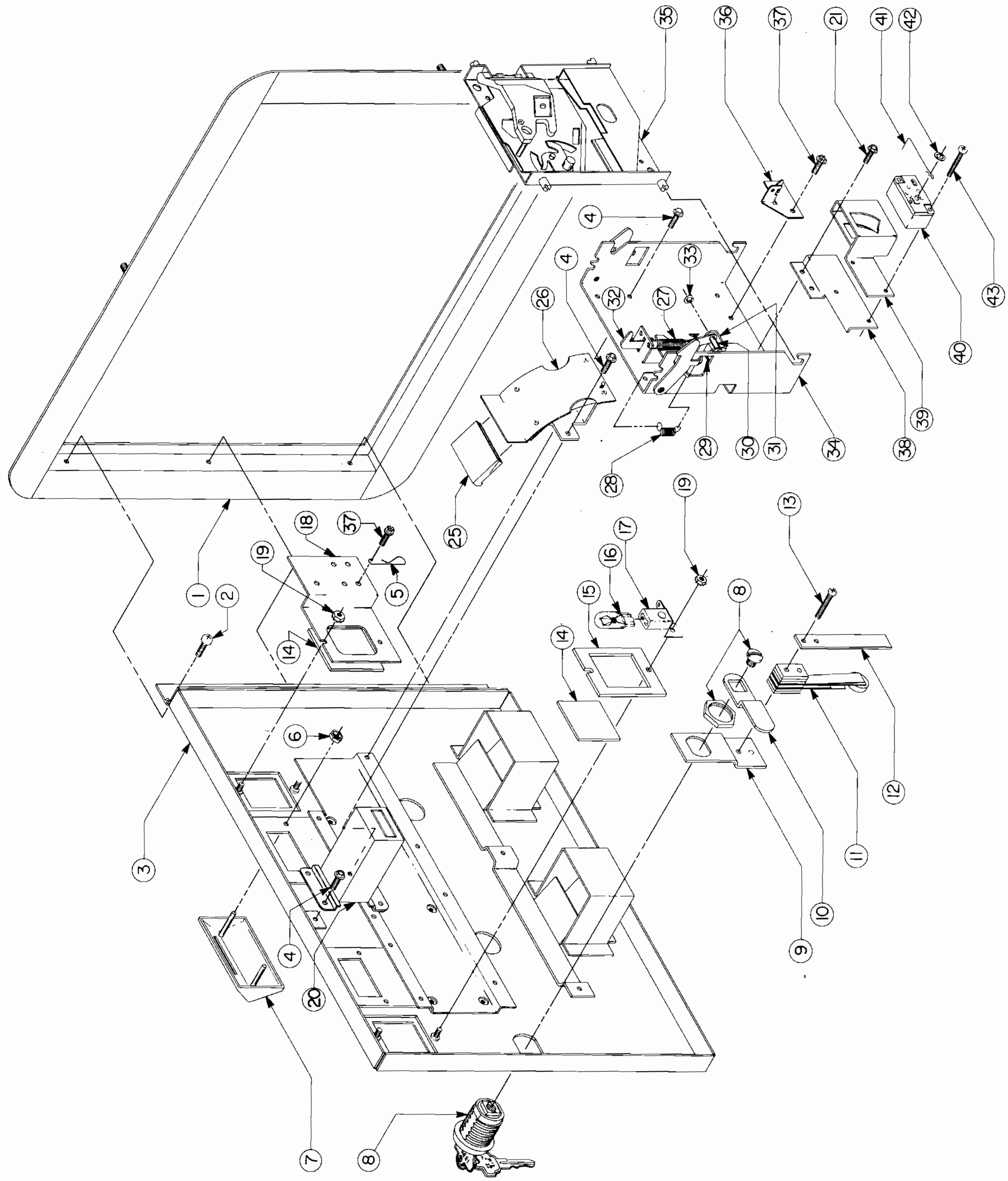


MAPPY - POWER CHASSIS ASSY. - 70VA, 115V. - ALL VERSIONS - PARTS LIST

ORDER BY PART NUMBER ***ONLY***

ITEM	PART NO.	DESCRIPTION
1	0945-00108-00XF	CHASSIS
2	A945-00029-0100	MTG. PLATE & BARRIER ASSY.
3	0945-00107-01XF	STRAP (2 REQ'D.)
4	0017-00101-0123	#8 x 1/4 UNSLOT. HEX HD. SCR. (12 REQ'D.)
5	MT00-00101-B000	ISOLATION TRANSFORMER W/O SHIELD ASSY. — 115V., 50/60 HZ.
	0017-00103-0061	#8-32 HEX NUT W/SEMS (4 REQ'D.)
6	MT00-00105-A000	POWER TRANSFORMER W/O SHIELD — 70VA, 115V. (UPRIGHT ONLY)
6	MT00-00105-B000	POWER TRANSFORMER W/SHIELD — 70VA, 115V. (COCKTAIL ONLY)
	0017-00103-0061	#8-32 HEX NUT W/SEMS (4 REQ'D.)
7	0945-00902-0000	SNAP BUSHING (3 REQ'D.)
8	0017-00101-0067	#6 x 3/8 PHIL. PAN HD. SCR. (11 REQ'D.)
	0945-00103-00XF	PARTITION — LOCATED UNDER CHASSIS (NOT SEEN)
9	A945-00030-0400	CONNECTOR & CABLE ASSY.
10	0017-00021-0297	2 POSITION CONNECTOR
11	A945-00030-0300	CONNECTOR & CABLE ASSY.
12	A945-00030-0500	CONNECTOR & CABLE ASSY.
13	A945-00030-0200	CONNECTOR & CABLE ASSY.
14	A945-00021-0000	CONVENIENCE OUTLET ASSY.
15	0017-00101-0573	#6-32 x 1/2 PHIL. RND. HD. SCR. (2 REQ'D.)
	0017-00103-0084	#6-32 HEX NUT W/SEMS (2 REQ'D.)
	A945-00025-0000	FILTER ASSY. — 125V. — UNDER CHASSIS (NOT SEEN)
16	0017-00021-0510	TERMINAL STRIP
	0017-00101-0140	#4-40 x 5/16 PHIL. PAN HD. SCR. (2 REQ'D.)
17	0017-00101-0660	#10-32 x 3/4 SLT. PAN HD. SCREW (NOT SEEN)
	0017-00104-0107	#10 FLAT WASHER
	0017-00103-0081	#10-32 HEX NUT W/SEMS
18	0017-00003-0263	SLO-BLO FUSE — 4A., 250V.
19	0017-00003-0005	FUSE — 2A., 250V.
	0017-00003-0444	FUSE HOLDER — QUICK CONN. (2 REQ'D.) — FOR ABOVE FUSES
20	0945-00904-0000	5 POSITION FUSE HOLDER
	0945-00908-0000	FUSE BLOCK INSULATOR
	0017-00003-0217	SLO-BLO FUSE — 2.5A., 250V. (2 REQ'D.)
	0017-00003-0007	SLO-BLO FUSE — 3A., 250V. (2 REQ'D.)
	0017-00003-0263	SLO-BLO FUSE — 4A., 250V.
	0945-00903-0000	FUSE HOLDER BARRIER
	0017-00101-0067	#6 x 3/8 PHIL. PAN HD. SCREW (2 REQ'D.)
21	0017-00101-0780	#6 x 1/2 PHIL. PAN HD. SCREW (2 REQ'D.)
	0017-00021-0629	5 POSITION TERMINAL STRIP (UNDER CHASSIS)
	A945-00019-0000	LINE CORD ASSY. — 115V. (NOT SHOWN)
	A945-00033-0000	MAGNETIC SHIELD & LABEL ASSY. (NOT SHOWN)

FRONT DOOR ASSEMBLY — U.S.A. 25¢

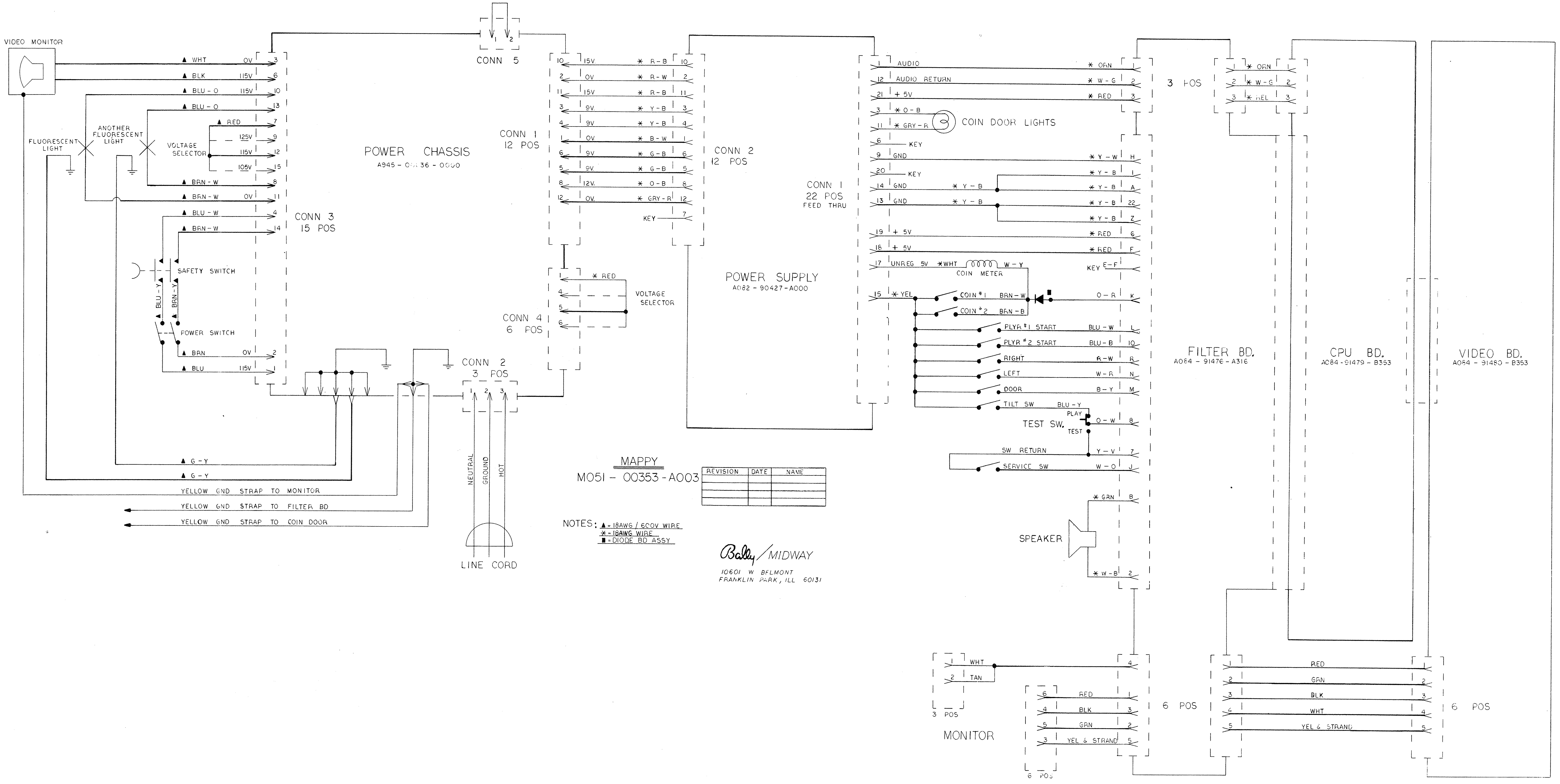


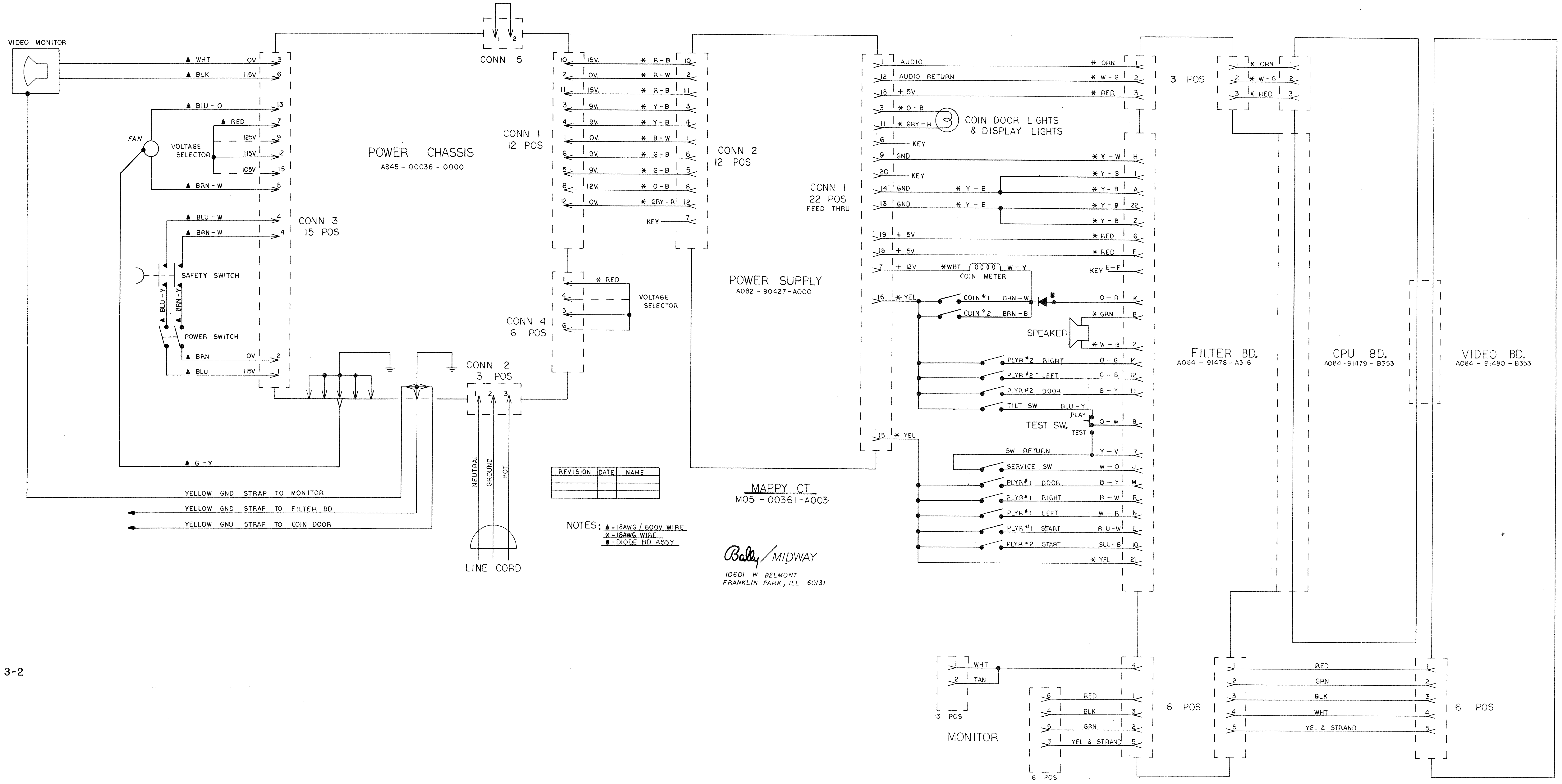
FRONT DOOR ASSEMBLY — U.S.A. 25¢ — PARTS LIST

*ORDER BY PART NUMBER **ONLY***

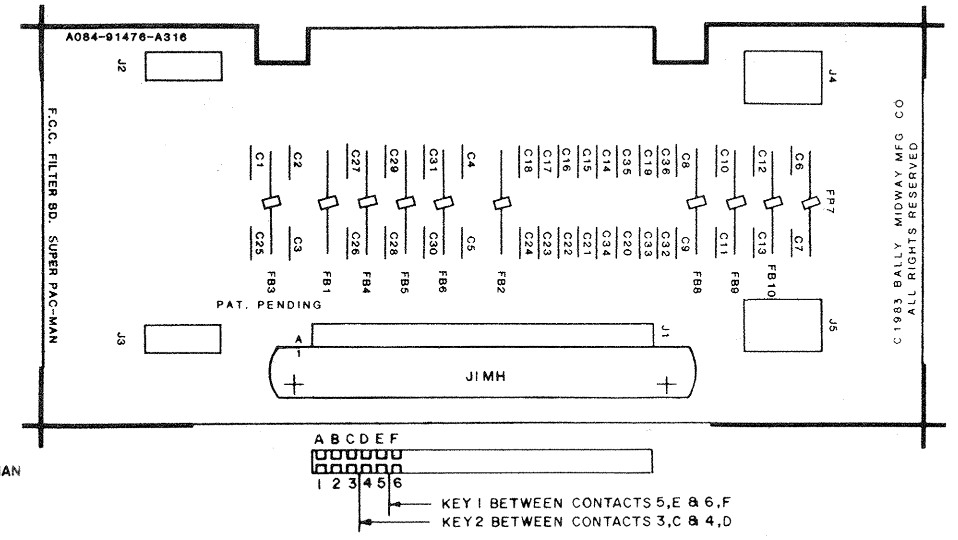
ITEM	PART NO.	DESCRIPTION
1	0090-00002-04BK	DOUBLE ENTRY COIN DOOR FRAME
2	0017-00101-0121	#6-32 x 5/16 PHIL. TRS. HD. SCR. (3 REQ'D.)
3	A090-00073-02BK	DOUBLE ENTRY COIN DOOR W/DRESS PLATE
4	0017-00101-0123	#8 x 1/4 UNSLOT. HEX HD. SCREW (12 REQ'D.)
5	0017-00007-0019	KEY HOOK
6	0017-00103-0059	PUSH NUT (4 REQ'D.)
7	0090-00912-0000	COIN ENTRY PLATE — 25¢ (2 REQ'D.)
8	A097-00005-0000	DOOR LOCK & KEY W/SCREW & NUT (OR)
8	A097-00006-0000	DOOR LOCK & KEY W/SCREW & NUT
9	0090-00128-00XF	DOOR TILT SWITCH BRKT.
10	0017-00005-0225	DOOR CAM
11	A090-00095-0000	DOOR TILT SWITCH
12	0090-00126-03XF	SWITCH BACK-UP PLATE
13	0017-00101-0525	#5-40 x 9/16" PHIL. HD. M.S. (2 REQ'D.)
	A090-00096-0000	DOOR TILT SWITCH & BRKT. ASSY. (ITEMS 9 & 11 THRU 13)
14	0090-00903-9500	25¢ WINDOW (2 REQ'D.)
15	0090-00143-00XF	COIN PLEX RETAINER
16	0017-00003-0219	12 VOLT LAMP — G.E. #194 (2 REQ'D.)
17	0017-00031-0048	WEDGE SOCKET W/BRKT. (2 REQ'D.)
18	A090-00100-0000	BRKT. ASSY.
19	0017-00103-0084	#6-32 HEX NUT W/SEMS (4 REQ'D.)
20	A090-00089-0000	COIN METER W/DIODE
21	0017-00101-0124	#6 x 1/4 UNSLOT. HEX HD. SCR. (4 REQ'D.)
25	0090-00911-0000	INSULATOR (2 REQ'D.)
26	A090-00112-0000	COIN CHUTE & TOP ASSY. (2 REQ'D.)
27	0010-00134-0000	SPRING
28	0010-00181-0000	SPRING
29	0017-00007-0083	1/8 x 1-5/8 ROLL PIN
30	0090-00129-00XF	PIVOT POST
31	0090-00167-00XF	PIVOT LEVER
32	0090-00182-00XF	REJECT LEVER
33	0017-00100-0018	E-RING
	A090-00088-0000	REJECT LEVER ASSY. (2 REQ'D.) (ITEMS 30 THRU 33)
34	A090-00105-0000	COIN ACCEPTOR FRAME ASSY. (2 REQ'D.)
35	0017-00005-0003	COIN ACCEPTOR W/STRING CUTTER (2 REQ'D.) (OR)
35	0017-00005-0211	COIN ACCEPTOR W/ANTI STRING DEVICE (2 REQ'D.) (OR)
35	0017-00005-0214	COIN ACCEPTOR W/STRING CUTTER (2 REQ'D.)
36	A090-00064-0000	ANTI-PENNY DEVICE
37	0017-00101-0099	#6 x 1/4 SLT. HEX HD. M.S. (2 REQ'D.)
38	0090-00162-00XF	COIN SWITCH MTG. BRKT.
39	0017-00005-0203	COIN SWITCH CHUTE
40	0017-00005-0195	COIN SWITCH
41	0010-00599-0000	COIN SWITCH WIRE
42	0017-00007-0015	PUSH-ON RING
	A090-00059-0400	COIN SWITCH & WIRE ASSY. (ITEMS 40 THRU 42)
43	0017-00101-0147	#4-40 x 3/4 PHIL. PAN. HD. M.S. (2 REQ'D.)
	A090-00077-0000	COIN GUIDE & SWITCH ASSY. (ITEMS 38 THRU 43)

Schematics and Wiring Diagrams


VIDEO MONITOR
FLUORESCENT LIGHT
ANOTHER FLUORESCENT LIGHT
VOLTAGE SELECTOR
SAFETY SWITCH
POWER SWITCH
POWER CHASSIS
A945 - 01136 - 0000
CONN 3
15 POS
CONN 5
CONN 1
12 POS
CONN 4
6 POS
CONN 2
3 POS
NEUTRAL
GROUND
HOT
LINE CORD
YELLOW GND STRAP TO MONITOR
YELLOW GND STRAP TO FILTER BD
YELLOW GND STRAP TO COIN DOOR
CONN 2
12 POS
POWER SUPPLY
A082 - 90427 - A000
CONN 1
22 POS
FEED THRU
COIN DOOR LIGHTS
COIN METER
TEST SW.
SPEAKER
MONITOR
3 POS
6 POS
FILTER BD.
A084 - 91476 - A316
CPU BD.
A084 - 91479 - B353
VIDEO BD.
A084 - 91480 - B353
MAPPY
M051 - 00353 - A003
REVISION
DATE
NAME
NOTES: ▲ = 18AWG / 600V WIRE
* = 18AWG WIRE
■ = DIODE BD ASSY
Bally / MIDWAY
10601 W BELMONT
FRANKLIN PARK, ILL 60131


VIDEO MONITOR
POWER CHASSIS
A945 - 00036 - 0000
CONN 5
CONN 1
12 POS
CONN 2
12 POS
CONN 3
15 POS
CONN 4
6 POS
CONN 2
3 POS
FAN
VOLTAGE SELECTOR
SAFETY SWITCH
POWER SWITCH
YELLOW GND STRAP TO MONITOR
YELLOW GND STRAP TO FILTER BD
YELLOW GND STRAP TO COIN DOOR
NEUTRAL
GROUND
HOT
LINE CORD
REVISION
DATE
NAME
NOTES: ▲ - 18AWG / 600V WIRE
✱ - 18AWG WIRE
■ - DIODE BD ASSY
POWER SUPPLY
A082 - 90427 - A000
CONN 1
22 POS
FEED THRU
MAPPY CT
M051 - 00361 - A003
Bally / MIDWAY
10601 W BELMONT
FRANKLIN PARK, ILL 60131
AUDIO
AUDIO RETURN
COIN DOOR LIGHTS
& DISPLAY LIGHTS
KEY
GND
COIN METER
COIN #1
COIN #2
SPEAKER
PLYR #2 RIGHT
PLYR #2 LEFT
PLYR #2 DOOR
TILT SW
TEST SW.
PLAY
TEST
SW RETURN
SERVICE SW
PLYR #1 DOOR
PLYR #1 RIGHT
PLYR #1 LEFT
PLYR #1 START
PLYR #2 START
3 POS
FILTER BD.
A084 - 91476 - A316
CPU BD.
A084 - 91479 - B353
VIDEO BD.
A084 - 91480 - B353
MONITOR
3 POS
6 POS
6 POS
6 POS
RED
GRN
BLK
WHT
YEL & STRAND
TAN

DESIGNATION NO.	DESCRIPTION
C1 – C5	390pf 50V. AX. CER.
C6, C7	470pf " " "
C8 - C13	100pf " " "
C14-C24	.01 µf " " "
C25	390pf " " "
C26-C29	.01 µf " " "
C30, C31	390pf " " "
C32-C36	.01 µf " " "
FB1-FB10	FERRITE BEAD
J1	P.C. EDGE CONN.
J2, J3	3 PIN HEADER
J4, J5	6 PIN HEADER
J1MH	(2) P.C. EDGE CONN. KEY
"	(2) 6-32 X 10 SLOT PAN SCREW
"	(2) WSH. 6 145-.250-.032
"	(1) BRKT. - CONN. FIN.
–	(1) INSULATED GND. STRAP
–	(1) 8-32 X 5 SLOT PAN SCREW
–	(1) 8-32 NUT HEX
A080-91476-A316	F.C.C. FILTER BD. SUPER PAC-MAN

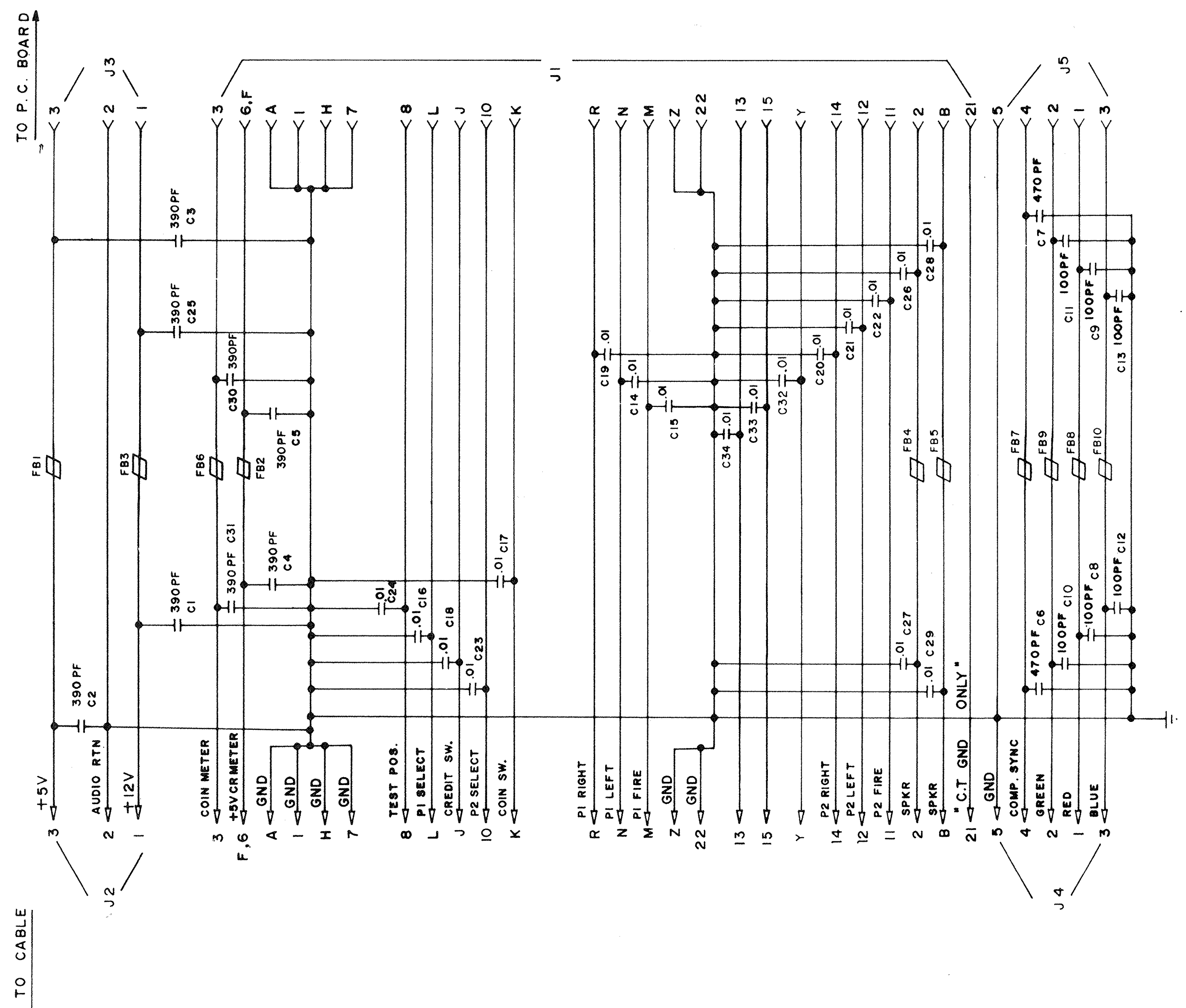


DESCRIPTION	Q'TY	DESIGNATION NO.	PART NO.
100pf 50V. AX. CER.	6	C8 - C13	0789-00800-1800
390pf " " "	8	C1 - C5, C25, C30, C31	0316-00800-0002
470pf " " "	2	C6, C7	0550-00800-0200
.01 µf " " "	20	C14-C24, C26-C29, C32-C36	0550-00800-0300
FERRITE BEAD	10	FB1-FB10	0316-00804-0002
P.C. EDGE CONN.	1	J1	0017-00021-0418
3 PIN HEADER	2	J2, J3	0017-00021-0443
6 PIN HEADER	2	J4, J5	0017-00021-0424
P.C. EDGE CONN. KEY	2	J1MH	0017-00021-0396
6-32 X 10 SLOT PAN SCREW	2	"	0017-00101-0574

DESCRIPTION	Q'TY	DESIGNATION NO.	PART NO.
WSH. 6 145-.250-.032	2	J1MH	0017-00104-0002
BRKT. - CONN. FIN.	1	"	0866-00118-00XF
INSULATED GND. STRAP	1	–	3000-17143-0700
8-32 X 5 SLOT PAN SCREW	1	–	0017-00101-0595
8-32 NUT HEX	1	–	0017-00103-0008
F.C.C. FILTER BD. SUPER PAC-MAN	1	A080-91476-A316	A080-91476-A316

REVISIONS

PROJECT ENG: L. DEKKER		USED ON SUPER PAC-MAN	Bally / MIDWAY MFG. CO. FRANKLIN PK.
DO NOT SCALE DWG.	HEAT TREAT / SCALE FULL	NO. REQ'D 1 PER	
DIM. TOLERANCES UNLESS SPECIFIED / DRN. RLW / CKD. / DATE 02/08/83	MAT'L / FINISH	ASSEMBLY DRAWING F.C.C. FILTER BD. SUPER PAC-MAN A084-91476-A316	PART NO M051-00316-A026



NOTE:
ALL .01 CAPS ARE MF
ALL CAPS AX. CER. UNLESS NOTED OTHERWISE
FB = FERRITE BEAD

PROJECT ENG: L. DEKKER

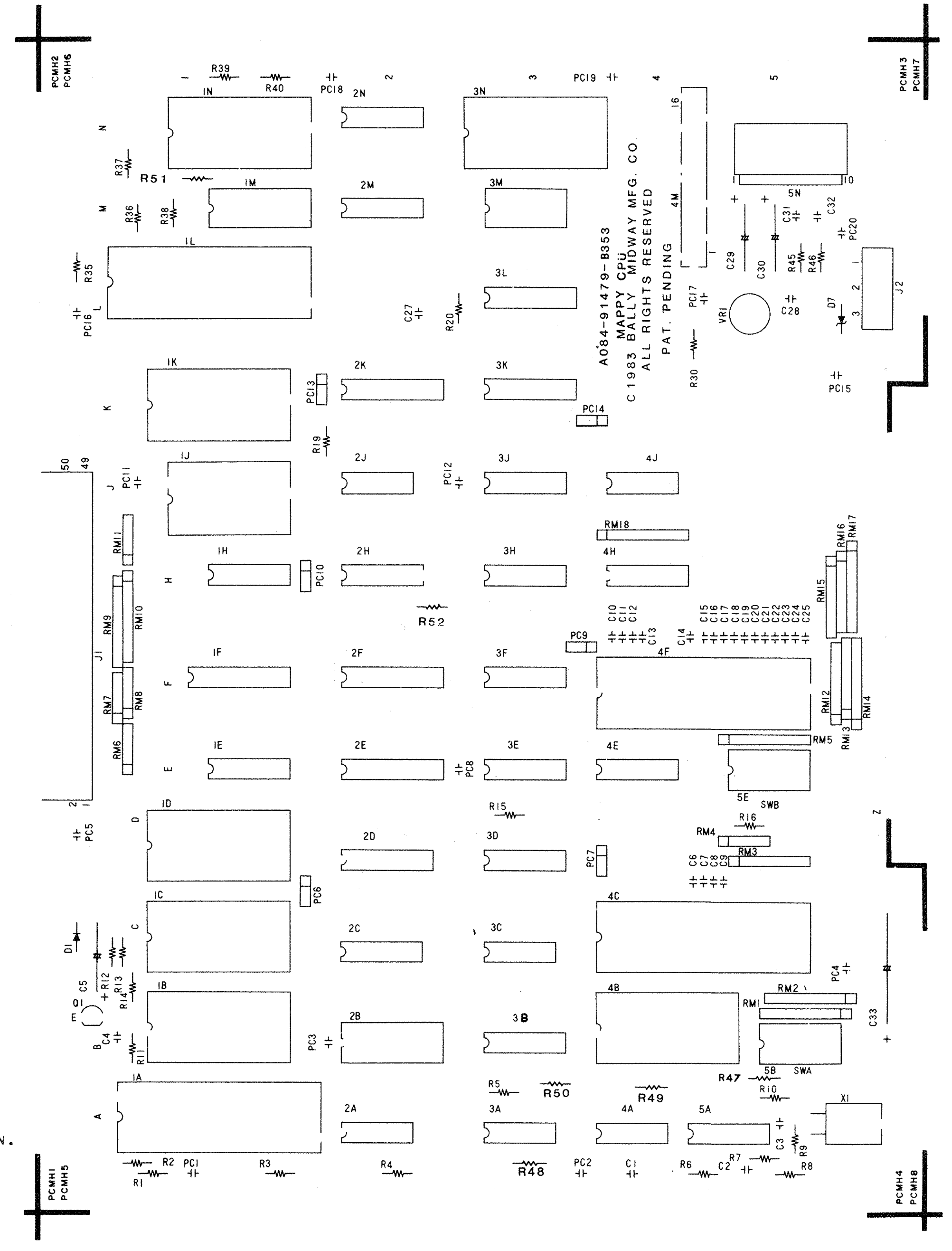
THIS DWG IS CONFIDENTIAL & PROPERTY OF MIDWAY MFG. CO.

DIM. TOLERANCES UNLESS OTHERWISE SPEC: CONCENTRICITY T.I.R. .002; FRACTIONAL ± 1/64; DECIMAL ± .005; HOLE DIA + .002 - .000; ANGLE ± 1/2°; DO NOT SCALE DWG	SUPER PAC-MAN / DRN. RLW / DATE 02/07/83 / SCALE FULL	MIDWAY MFG. CO. FRANKLIN PK., IL 60131 A BALLY CO. / SCHEMATIC F.C.C. FILTER BD. SUPER PAC-MAN A084-91476-A316	REVISIONS / PART NO. M051 00316 A027

DESIGNATION LIST

DESIGNATION NO.	DESCRIPTION
C3	100 PF
C4	.001 MF
C5	22 MF AX ELEC.
C6-C25	.01 MF
C28	.01 MF
C29	2.2 MF AX ELEC.
C30	47 MF AX ELEC.
C31,32	.033 MF
C33	220 MF
PC1-PC5	0.1 MF
PC6,PC7	1 MF
PC8	0.1 MF
PC9,PC10	1 MF
PC11,PC12	0.1 MF
PC13,PC14	1 MF
PC15-PC20	0.1 MF
R1	2.2K OHM 1/4W 5%
R2	1K OHM 1/4W 5%
R3	470 OHM 1/4W 5%
R4,R5	1K OHM 1/4W 5%
R7	330 OHM 1/4W 5%
R10	330 OHM 1/4W 5%
R11	47K OHM 1/4W 5%
R12	4.7K OHM 1/4W 5%
R13	2.2K OHM 1/4W 5%
R14,R15	1K OHM 1/4W 5%
R16	4.7K OHM 1/4W 5%
R19	1K OHM 1/4W 5%
R30	10K OHM 1/4W 5%
R35	2.2K OHM 1/4W 5%
R36,R37	1K OHM 1/4W 5%
R38	470 OHM 1/4W 5%
R39,R40	1K OHM 1/4W 5%
R45,R46	4.7 OHM 1/4W 5%
R47-R52	100 OHM 1/4W 5%
RM1,RM2	4.7K OHM 9 PIN SIP 1/8W
RM3	2.2K OHM 8 PIN SIP 1/8W
RM4	1K OHM 5 PIN SIP 1/8W
RM5	2.2K OHM 9 PIN SIP 1/8W
RM6,RM7,RM8	2.2K OHM 5 PIN SIP 1/8W
RM9,RM10	2.2K OHM 9 PIN SIP 1/8W
RM11	2.2K OHM 5 PIN SIP 1/8W
RM12,RM13	2.2K OHM 8 PIN SIP 1/8W
RM14	1K OHM 9 PIN SIP 1/8W
RM15,RM16	2.2K OHM 8 PIN SIP 1/8W
RM17	1K OHM 9 PIN SIP 1/8W
RM18	4.7K OHM 9 PIN SIP 1/8W
VR1	1K POT
D1	1N914B
D7	1N4735A
Q1	2N3391A
IC 1A	CPU 68A09E
IC 2A	74LS74
IC 3A	74LS04
IC 4A	74LS02
IC 5A	74LS368
IC 1B	2764 EPROM MP1-1
IC 2B	PAL SPC-6
IC 3B	74LS109
IC 4B	16XX CUSTOM IC
IC 1C	2764 EPROM MP1-2
IC 2C	74LS138
IC 3C	74LS32
IC 4C	58XX CUSTOM IC
IC 1D	2764 EPROM MP2-3
IC 2D	2114 STATIC RAY
IC 3D	74LS161

DESIGNATION NO.	DESCRIPTION
IC 1E	74LS367
IC 2E	74LS245
IC 3E,4E	74LS157
IC 1F,2F	74LS245
IC 3F	74LS257
IC 4F	58XX CUSTOM IC
IC 1H,2H	74LS367
IC 3H	74LS257
IC 4H	74LS368
IC 2J	74LS74
IC 3J	74LS158
IC 4J	74LS08
IC 1K	2764 EPROM MP1-4
IC 2K	74LS245
IC 3K	M2148 RAM KIT A
IC 1L	CPU 68A09E
IC 3L	M2148 RAM KIT A
IC 1M	PAL SPC-5
IC 2M	74LS259
IC 3M	BP ROM
IC 4M	99XX CUSTON IC
IC 1N	07XX CUSTOM IC
IC 2N	74LS367
IC 3N	15XX CUSTOM IC
IC 5N	LA 4460 AUDIO AMP
HS IC 5N	HEATSINK
ICS 1A	40 PIN IC SOCKET
ICS 1B	28 PIN IC SOCKET
ICS 2B	20 PIN IC SOCKET
ICS 4B	28 PIN IC SOCKET
ICS 1C	28 PIN IC SOCKET
ICS 4C	42 PIN IC SOCKET
ICS 1D	28 PIN IC SOCKET
ICS 2D	18 PIN IC SOCKET
ICS 4F	42 PIN IC SOCKET
ICS 1K	28 PIN IC SOCKET
ICS 3K	18 PIN IC SOCKET
ICS 1L	40 PIN IC SOCKET
ICS 3L	18 PIN IC SOCKET
ICS 1M	16 PIN IC SOCKET
ICS 3M	20 PIN IC SOCKET
ICS 1N	28 PIN IC SOCKET
J2	3 PIN AMP CONN.
J1	50 PIN CONN. SOCKET
--	50 PIN CABLE ASSY
MHHSIC 5N	H.S. MTG. SCREW 4-40X7 PAN HD
MHHSIC 5N	H.S. #4 FLT. WASHER
MHHSIC 5N	H.S. 4-40 HEX. NUTS
PC MH1-PC MH4	P.C. MTG. SCREW 6-32X6
PC MH5-PC MH8	METAL STANDOFFS CARD SPACER FIN.
SWA,SWB	8 POS. DIP. SW.
X1	18.432 MHZ CRYSTAL
A080-91479-B353	MAPPY CPU P.C.



CROSS REFERENCE LIST

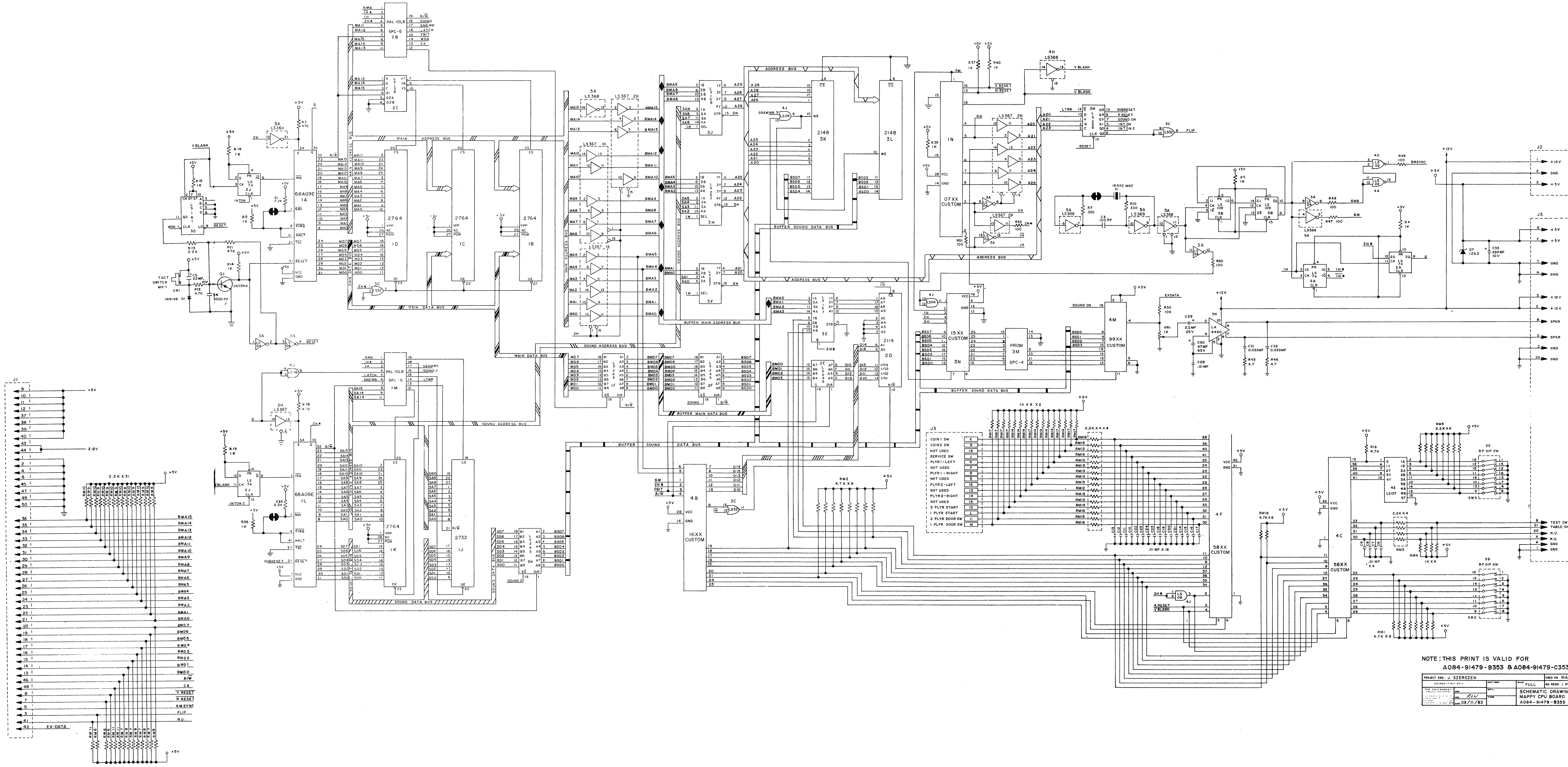
DESCRIPTION	QTY	DESIGNATION NO.	PART NOS.
100 PF	1	C3	0300-00800-0500
.001 MF	1	C4	0300-00800-0600
.033 MF	2	C31,C32	0353-00800-0002
.01 MF	21	C6-C25,C28	0353-00800-0001
0.1 MF	14	PC1-PC5,PC8,PC11,PC12,PC15-PC20	0508-00800-0900
1 MF	6	PC6,PC7,PC9,PC10,PC13,PC14	0935-00814-0100
2.2 MF AX ELEC	1	C29	0353-00800-0005
22 MF AX ELEC	1	C5	0353-00800-0004
47 MF AX ELEC	1	C30	0353-00800-0003
220 MF	1	C33	0508-00800-1400
4.7 OHM 1/4W 5%	2	R45,R46	0062-042B3-1XXX
100 OHM 1/4W 5%	6	R47-R52	0062-110B3-1XXX
330 OHM 1/4W 5%	2	R7,R10	0062-144B3-1XXX
470 OHM 1/4W 5%	2	R3,R38	0062-156B3-1XXX
1K OHM 1/4W 5%	10	R2,R4,R5,R14,R15,R19,36,37,39,40	0062-179B3-1XXX
2.2K OHM 1/4W 5%	3	R1,R13,R35	0062-195B3-1XXX
4.7K OHM 1/4W 5%	2	R12,R16	0062-211B3-1XXX
10K OHM 1/4W 5%	1	R30	0062-227B3-1XXX
47K OHM 1/4W 5%	1	R11	0062-259B3-1XXX
1K OHM 5 PIN SIP 1/8W	1	RM4	0508-00804-0100
1K OHM 9 PIN SIP 1/8W	2	RM14,RM17	0508-00804-0200
2.2K OHM 5 PIN SIP 1/8W	4	RM6,RM7,RM8,RM11	0353-00804-0001
2.2K OHM 9 PIN SIP 1/8W	3	RM5,RM9,RM10	0508-00804-0300
4.7K OHM 9 PIN SIP 1/8W	3	RM1,RM2,RM18	0508-00804-1000
2.2K OHM 8 PIN SIP 1/8W	5	RM3,RM12,RM13,RM15,RM16	0508-00804-1200
POT 1K	1	VR1	0508-00804-1300
1N914B	1	D1	0508-00801-0100
1N4735A	1	D7	0064-079XX-XXJX
2N3391A	1	Q1	0508-00802-0200
74LS02	1	IC 4A	0300-00803-0028
74LS04	1	IC 3A	0300-00803-0029
74LS08	1	IC 4J	0300-00803-0030
74LS32	1	IC 3C	0300-00803-0031
74LS74	2	IC 2A,2J	0300-00803-0032
74LS109	1	IC 3B	0316-00803-0001
74LS138	1	IC 2C	0300-00803-0033
74LS157	2	IC 3E,4E	0300-00803-0050
74LS158	1	IC 3J	0300-00803-0049
74LS161	1	IC 3D	0300-00803-0044
74LS245	4	IC 1F,2E,2F,2K	0300-00803-0046
74LS257	2	IC 3F,3H	0316-00803-0002
74LS259	1	IC 2M	0316-00803-0003
74LS367	4	IC 1E,1H,2H,2N	0300-00803-0039
74LS368	2	IC 4H,5A	0316-00803-0004
M2148 RAM KIT A	2	IC 3K,3L	0550-00803-6200
2114 STATIC RAM	1	IC 2D	0508-00803-0300
PAL SPC-6	1	IC 2B	0316-00803-0010
PAL SPC-5	1	IC 1M	0316-00803-0009
BP ROM	1	IC 3M	0353-00803-0005
2764 EPROM MP1-1	1	IC 1B	0353-00803-0001
2764 EPROM MP1-2	1	IC 1C	0353-00803-0002
2764 EPROM MP2-3	1	IC 1D	0353-00803-0003
2764 EPROM MP1-4	1	IC 1K	0353-00803-0004

DESCRIPTION	QTY	DESIGNATION NO.	PART NOS.
CPU 68A09E	2	IC 1A,1L	0316-00803-0011
07XX CUSTOM IC	1	IC 1N	0066-006CX-XAPX
15XX CUSTOM IC	1	IC 3N	0066-020CX-XAPX
16XX CUSTOM IC	1	IC 4B	0066-021CX-XAPX
58XX CUSTOM IC	2	IC 4C,4F	0066-028CX-XAPX
LA 4460 AUDIO AMP	1	IC 5N	0066-373BX-XBAX
99XX CUSTOM IC	1	IC 4M	0066-029CX-XAPX
HEATSINK	1	HS IC 5N	0353-00900-0000
16 PIN IC SOCKET	1	ICS 3M	0932-00817-0100
18 PIN IC SOCKET	3	ICS 2D,3K,3L	0300-00804-0900
20 PIN IC SOCKET	2	ICS 1M,2B	0550-00804-2300
28 PIN IC SOCKET	7	ICS 1B,1C,1D,1K,1N,3N,4B	0508-00804-0400
40 PIN IC SOCKET	2	ICS 1A,1L	0508-00804-1800
42 PIN IC SOCKET	2	ICS 4C,4F	0508-00804-1900
3 PIN AMP. CONN.	1	J2	0017-00021-0443
50 PIN CONN. SOCKET	1	J1	0300-00804-1104
50 PIN CABLE ASSY	1	—	A300-00020-0000
HEATSINK MTG.SCREW 4-40X7 PAN HD	2	MH HS IC 5N	0017-00101-0511
H.S. #4 FLT. WASHER	4	MH HS IC 5N	0017-00104-0092
H.S. 4-40 HEX NUTS	2	MH HS IC 5N	0017-00103-0093
PC. MTG. SCREW 6-32X6	4	PCMH1-PCMH4	0017-00101-0339
METAL STANDOFF CARD SPACER FIN.	4	PCMH5-PCMH8	0316-00700-00XF
8 POS. DIP SW.	2	SWA,SWB	0300-00804-0700
18.432 MHZ	1	CRYSTAL 1	0508-00804-1400
MAPPY CPU P.C.	1	———	A080-91479-B353

NOTE : THIS PRINT IS VALID FOR
A084-91479-B353 & A084-91479-C353.

REVISIONS

PROJECT ENG: J. SZERSZEN		USED ON MAPPY	Bally / MIDWAY MFG. CO. FRANKLIN PK ILL
DO NOT SCALE DWG	HEAT TREAT	SCALE FULL	NO. REQ'D 1 PER
DIM. TOLERANCE UNLESS SPECIFIED	DRN. TBB	MAT'L.	MAPPY CPU ASSY DWG. A084-91479-B353
	CKD.	FINISH	PART NO M051 - 00353 - B008
	DATE 03/02/83		



NOTE: THIS PRINT IS VALID FOR
A084-91479-B353 & A084-91479-C353

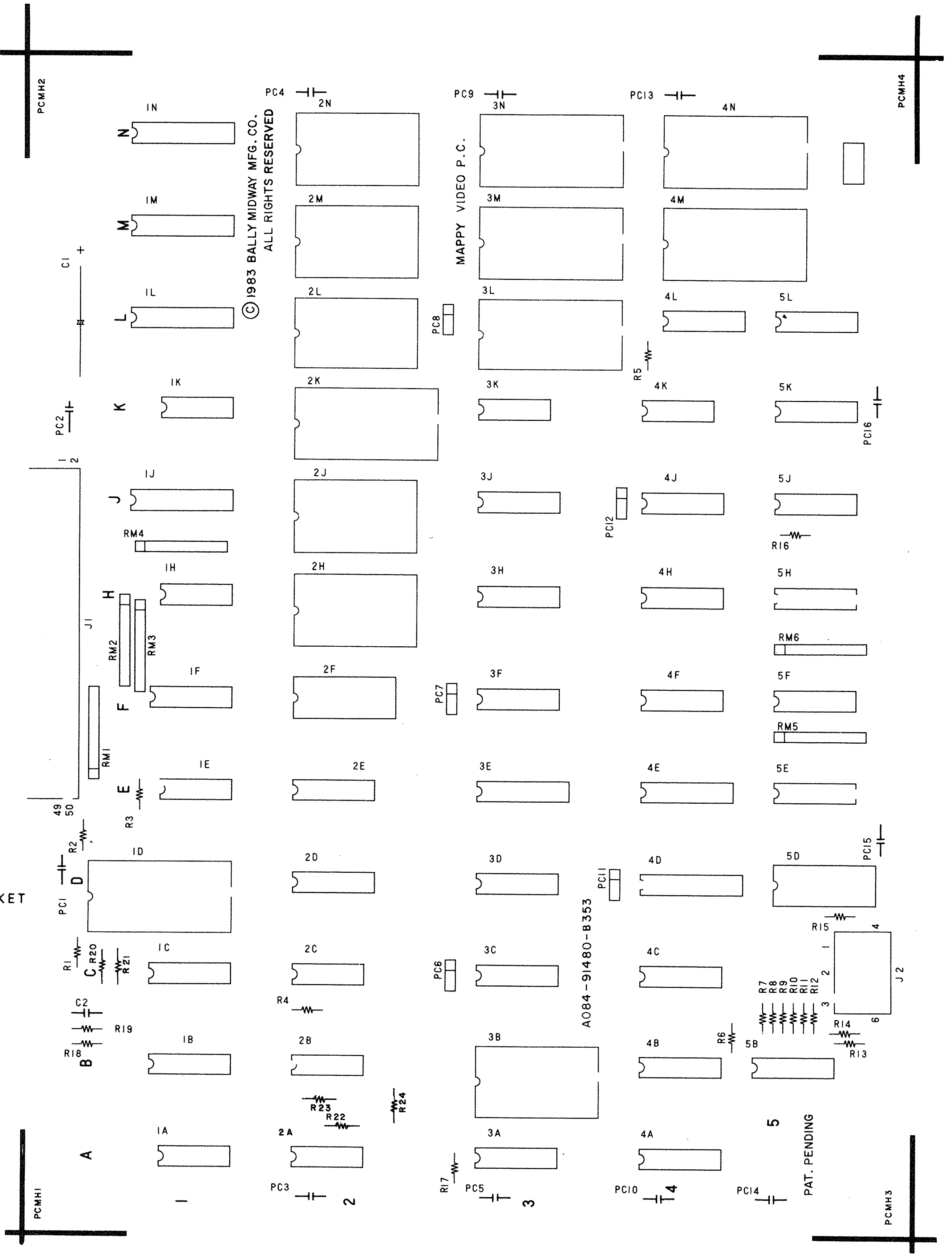
REVISIONS

PROJECT ENG: J. SZERSZEN		USED ON MAPPY	Bally / MIDWAY MFG. CO. FRANKLIN PK ILL
DO NOT SCALE DWG	SCALE FULL	NO. REQ'D 1 PER	
CKD. RLW	DATE 03/11/83	SCHEMATIC DRAWING MAPPY CPU BOARD A084-91479-B353	PART NO M051-00353-B009

DESIGNATION LIST

DESIGNATION	DESCRIPTION
C1	220 MF
PC1-PC5	0.1 MF CER.
PC6-PC8	1 MF TANT.
PC9,PC10	0.1 MF CER.
PC11,PC12	1 MF TANT.
PC13-PC16	0.1 MF CER.
R1-R7	1K OHM 1/4W 5%
R8	470 OHM 1/4W 5%
R9	220 OHM 1/4W 5%
R10	1K OHM 1/4W 5%
R11	470 OHM 1/4W 5%
R12,R13	220 OHM 1/4W 5%
R14	470 OHM 1/4W 5%
R15	100 OHM 1/4W 5%
R16,R17	1K OHM 1/4W 5%
R20,R21	100 OHM 1/4W 5%
R22	82 OHM 1/4W 5%
R23,R24	100 OHM 1/4W 5%
RM1-RM4	2.2 K 9 PIN SIP
RM5,RM6	1 K 9 PIN SIP
IC 1A	74LS00
IC 2A	74LS04
IC 3A,4A	74LS194
IC 1B	74LS368
IC 2B	74LS32
IC 3B	2732 EPROM MP1-5
IC 4B	74LS158
IC 5B	BP-ROM MP2-5B
IC 1C	74LS139
IC 2C	74LS74
IC 3C	74LS174
IC 4C	BP-ROM MP2-4C
IC 1D	07XX CUSTOM IC
IC 2D	74LS258
IC 3D	74LS174
IC 4D	74LS377
IC 5D	PAL 2-5D
IC 1E	74LS08
IC 2E	74LS257
IC 3E,4E	2148 RAM KIT A
IC 5E	74LS298
IC 1F	74LS138
IC 2F	17XX CUSTOM IC
IC 3F,4F	74LS161
IC 5F	74LS365
IC 1H	74LS32
IC 2H	2KX8 RAM
IC 3H,4H	74LS161
IC 5H	74LS365

DESIGNATION	DESCRIPTION
IC 1J	74LS245
IC 2J	2KX8 RAM
IC 3J,4J	74LS161
IC 5J	74LS157
IC 1K	74LS08
IC 2K	04XX CUSTOM IC
IC 3K	74LS86
IC 4K	74LS20
IC 5K	BP-ROM MP2-5K
IC 1L	74LS245
IC 2L	2KX8 RAM
IC 3L	12XX CUSTOM IC
IC 4L	74LS174
IC 5L	74LS378
IC 1M	74LS245
IC 2M	2KX8 RAM
IC 3M	2764 EPROM MP1-6
IC 4M	11XX CUSTOM IC
IC 1N	74LS245
IC 2N	2KX8 RAM
IC 3N	2764 EPROM MP1-7
ICS 3B	24 PIN IC SOCKET
ICS 5B	16 PIN IC SOCKET
ICS 4C	16 PIN IC SOCKET
ICS 1D	28 PIN IC SOCKET
ICS 5D	20 PIN IC SOCKET
ICS 3E,4E	18 PIN IC SOCKET
ICS 2F	20 PIN IC SOCKET
ICS 2H	24 PIN IC SOCKET
ICS 2J	24 PIN IC SOCKET
ICS 2K	28 PIN IC SOCKET
ICS 5K	16 PIN IC SOCKET
ICS 2L	24 PIN IC SOCKET
ICS 3L	28 PIN IC SOCKET
ICS 2M	24 PIN IC SOCKET
ICS 3M,4M	28 PIN IC SOCKET
ICS 2N	24 PIN IC SOCKET
ICS 3N	28 PIN IC SOCKET
J2	6 PIN AMP CONN.
J1	50 PIN CONN. SOCKET
PCMH1-PCMH4	P.C. MNTG SCREWS



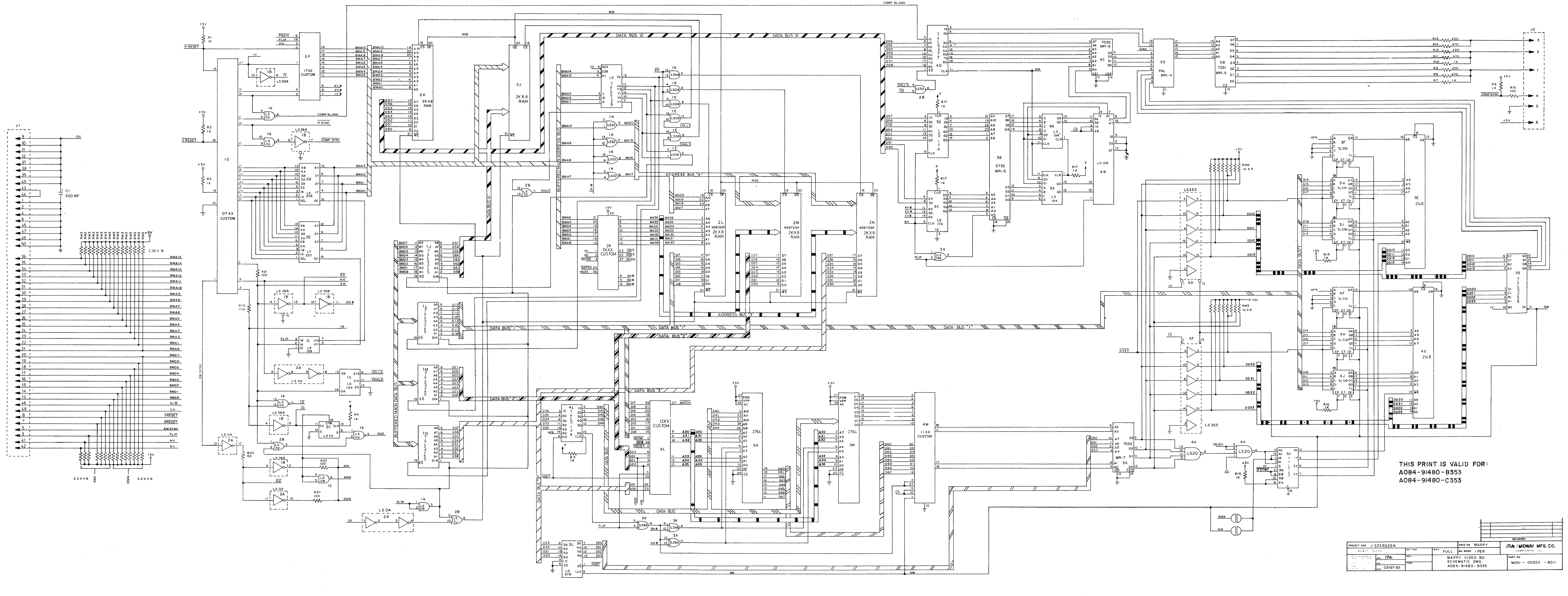
CROSS REFERENCE LIST

DESCRIPTION	QTY	DESIGNATION NO.	PART NOS.
0.1 MF CER	11	PC1-PC5,PC9,PC10,PC13-PC16	0508-00800-0900
220 MF	1	C1	0508-00800-1400
1 MF TANT	5	PC6,PC7,PC8,PC11,PC12	0935-00814-0100
82 OHM 1/4W 5%	1	R22	0062-104B3-1XXX
100 OHM 1/4W 5%	5	R15,R20,R21,R23,R24	0062-110B3-1XXX
220 OHM 1/4W 5%	3	R9,R12,R13	0062-133B3-1XXX
470 OHM 1/4W 5%	3	R8,R11,R14	0062-156B3-1XXX
1K OHM 1/4W 5%	10	R1-R7,R10,R16,R17	0062-179B3-1XXX
1K 9 PIN SIP	2	RM5,RM6	0508-00804-0200
2.2K 9 PIN SIP	4	RM1-RM4	0508-00804-0300
74LS00	1	IC 1A	0300-00803-0027
74LS04	1	IC 2A	0300-00803-0029
74LS08	2	IC 1E,1K	0300-00803-0030
74LS20	1	IC 4K	0300-00803-0052
74LS32	2	IC 1H,2B	0300-00803-0031
74LS74	1	IC 2C	0300-00803-0032
74LS86	1	IC 3K	0300-00803-0054
74LS138	1	IC 1F	0300-00803-0033
74LS139	1	IC 1C	0300-00803-0034
74LS157	1	IC 5J	0300-00803-0050
74LS158	1	IC 4B	0300-00803-0049
74LS161	6	IC 3F,3H,3J,4F,4H,4J	0300-00803-0044
74LS174	3	IC 3C,3D,4L	0300-00803-0047
74LS194	2	IC 3A,4A	0333-00803-0003
74LS245	4	IC 1J,1L,1M,1N	0300-00803-0046
74LS257	1	IC 2E	0316-00803-0002
74LS258	1	IC 2D	0353-00803-0013
74LS298	1	IC 5E	0316-00803-0019
74LS365	2	IC 5F,5H	0316-00803-0020
74LS368	1	IC 1B	0316-00803-0004
74LS377	1	IC 4D	0316-00803-0021
74LS378	1	IC 5L	0316-00803-0018
2148 RAM KIT A	2	IC 3E,4E	0550-00803-6200
2KX8 RAM	5	IC 2H,2J,2L,2M,2N	0508-00803-2500
PAL 2-5D	1	IC 5D	0353-00803-0009
BP-ROM MP2-5B	1	IC 5B	0353-00803-0010
BP-ROM MP2-4C	1	IC 4C	0353-00803-0011
BP-ROM MP2-5K	1	IC 5K	0353-00803-0012
2732 EPROM MP1-5	1	IC 3B	0353-00803-0006
2764 EPROM MP1-6	1	IC 3M	0353-00803-0007
2764 EPROM MP1-7	1	IC 3N	0353-00803-0008
04XX CUSTOM IC	1	IC 2K	0066-003CX-XAPX
07XX CUSTOM IC	1	IC 1D	0066-006CX-XAPX
11XX CUSTOM IC	1	IC 4M	0066-018CX-XAPX
12XX CUSTOM IC	1	IC 3L	0066-019CX-XAPX
17XX CUSTOM IC	1	IC 2F	0066-030CX-XAPX
16 PIN IC SOCKET	3	ICS 4C,5B,5K	0932-00817-0100
18 PIN IC SOCKET	2	ICS 3E,4E	0300-00804-0900
20 PIN IC SOCKET	2	ICS 2F,5D	0550-00804-2300
24 PIN IC SOCKET	6	ICS 2H,2J,2L,2M,2N,3B	0508-00804-0500
28 PIN IC SOCKET	6	ICS 1D,2K,3L,3M,3N,4M	0508-00804-0400
6 PIN AMP CONN.	1	J2	0017-00021-0424
50 PIN CONN.SCKT	1	J1	0300-U0804-1104
MAPPY VIDEO P.C.	1	——	A080-91480-B353
P.C. MNTG SCREWS	4	PCMH1- PCMH4	0017-00101-0339

REVISIONS

THIS PRINT IS VALID FOR:
A084-91480-B353
A084-91480-C353

PROJECT ENG: J.SZERSZEN			USED ON MAPPY	Bally / MIDWAY MFG. CO. FRANKLIN PK ILL.
DO NOT SCALE DWG.	HEAT TREAT	SCALE FULL	NO. REQ'D 1PER	
DIM. TOLERANCES UNLESS SPECIFIED: CONCENTRICITY T.I.R. .005; FRACTIONAL ±1/64; DECIMAL ±.005; HOLE DIA +.002 .000	DRN. TBB	MAT'L.	MAPPY VIDEO P.C. ASSY DWG. A084-91480-B353	PART NO. M051 - 00353 - B010
	CKD.	FINISH		
	DATE 03/16/83			



THIS PRINT IS VALID FOR:
A084-91480-B353
A084-91480-C353

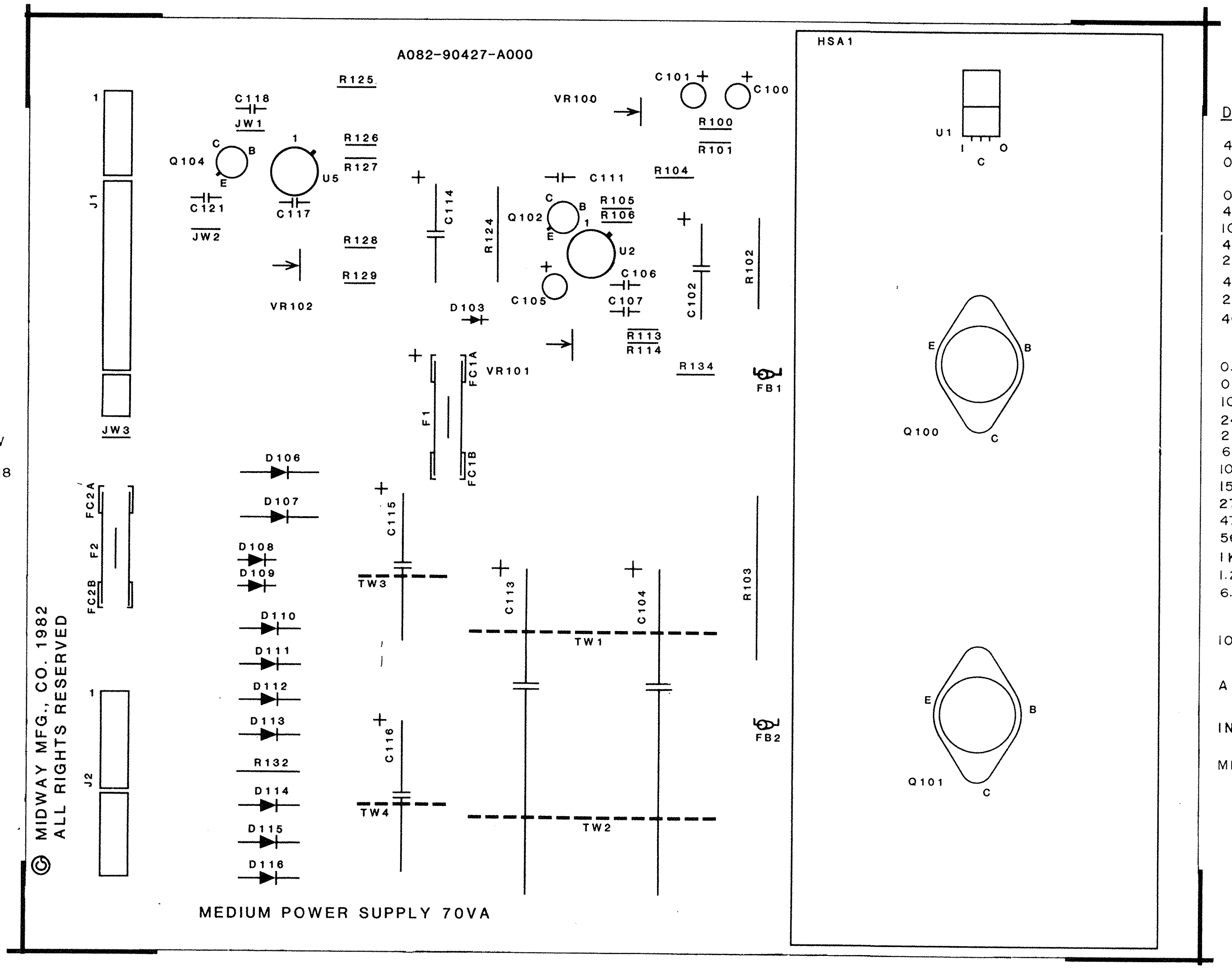
REVISIONS

PROJECT ENG J SZERSZEN		USED ON MAPPY	Bally / MIDWAY MFG. CO.
	SCALE FULL	NO REQ'D 1 PER	
DRN TRB		MAPPY VIDEO BD. SCHEMATIC DWG. A084-91480-B353	PART NO M051 - 00353 - B011
CKD			
DATE 03/07/83			

DESIGNATION LIST

DESIGNATION	DESCRIPTION
C100	10 µf RD TANT
C101	0.47 µf RD TANT 35 V
C102	470 µf AX. ELEC.
C104	25,000 µf AX. ELEC.
C105	4.7 µf RD TANT 35 V
C106, 107	0.1 µf
C111	0.1 µf
C113	40,000 µf AX. ELEC.
C114	470 µf " "
C115	2200 µf " " 25 V
C116	4700 µf " " "
C117	47 pf
C118	0.1 µf
C121	0.1 µf
R100	100 ohm 1/4 W 5% CRBN
R101	470 " " " "
R102	0.18 " 5 W "
R103	0.16 " 15 W "
R104	68 " 1/2 W " CRBN
R105	24 " 1/4 W " "
R106	270 " " " "
R113	1.2 K " " " "
R114	560 " " " "
R124	25 " 5W 10%
R125	68 " 1/2 W 5% CRBN
R126	10 " 1/4 W 5% "
R127	1 K " " " "
R128	6.2 K " " " "
R129	1 K " " " "
R132	150 " 2W 10%
R134	68 " 1/2W 5%
VR 100, 101, 102	100 ohm POT

DESIGNATION	DESCRIPTION
D103	IN 4001
D106, 107	MR 750
D108, 109	IN 4001
D110 - D116	A15F 50V 5A
Q102, Q104	2N2905
U2, U5	LM305
FB1, FB2	FERRITE BEAD
FBMH1, FBMH2	FERRITE BEAD MTG HDRW. 2-20G SOLID WIRE
HSA1	HEAT SINK ASSY.
MHHSA	HEATSINK ASSY MTG HDRW 2-4-40X10 SLT RND 4-WASHER, 4, 120-.250-018 2-4-40 HEX NUT THERMAL COMPOUND
F1	FUSE, 1/4A, SLO-BLO
F2	FUSE, 1 AMP
F1, F2	FUSE CLIP W/STOP
J1	2 POS. KK-156
J1, J2	5 " " "
J1	13 " " "
J2	6 " " "
JW1, JW2, JW3	JUMPER WIRE
TW1 - TW4	TIE WRAP
LB1	TAG, FUSE 1/4A. SLO-BLO
LB2	TAG, FUSE 1 AMP
LB3	TAG, PWR SPLY I.D.



MEDIUM POWER SUPPLY 70VA

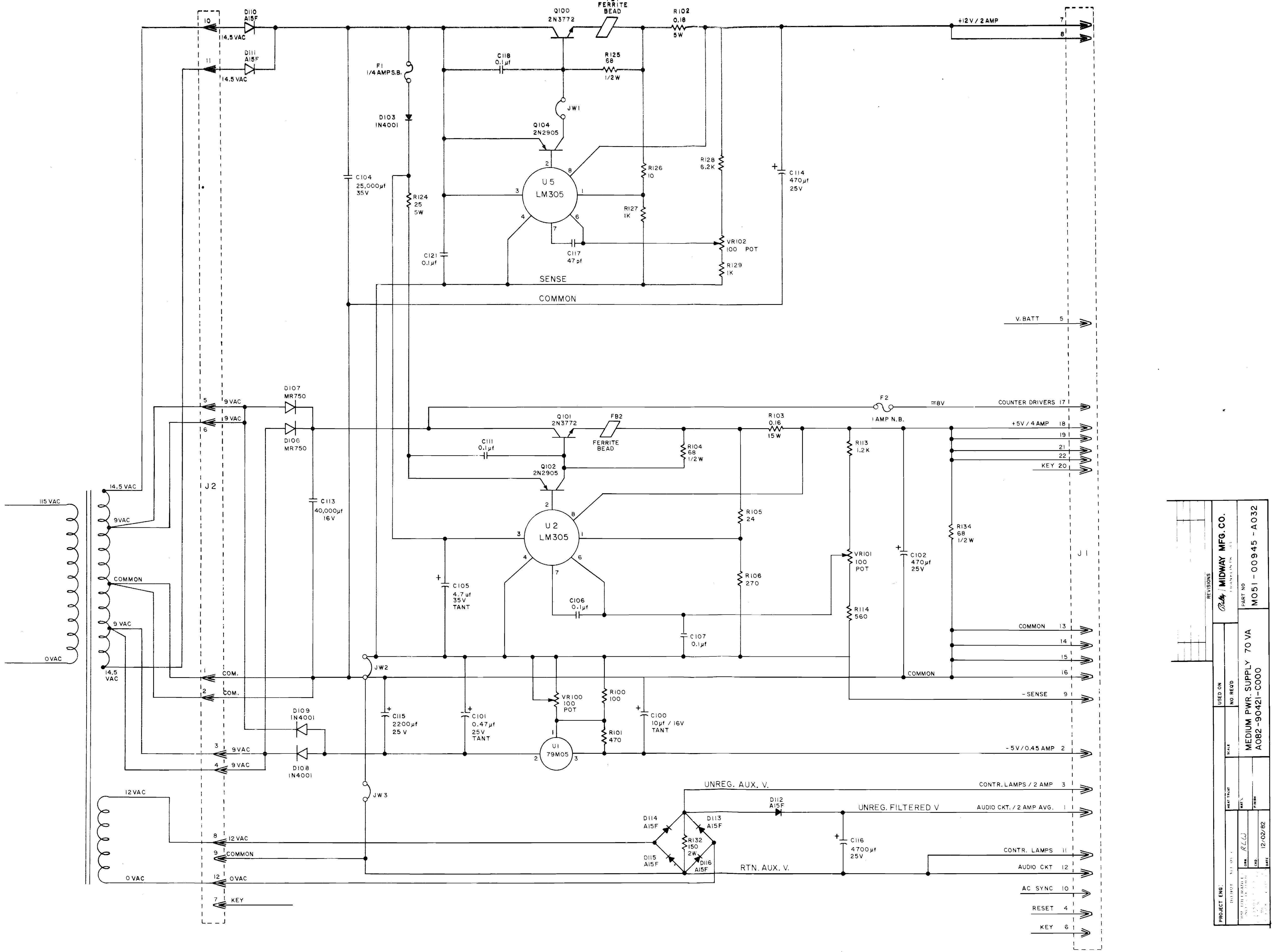
CROSS REFERENCE LIST

DESCRIPTION	QTY	DESIG. NOS.	PART NOS.
47 pf	1	C117	0945-00811-0100
0.1 µf	5	C106, 107, 111, 118, 121	0945-00811-0200
0.47 µf RD TANT 35 V	1	C101	0945-00816-1100
4.7 µf " " "	1	C105	0945-00811-0400
10 µf " "	1	C100	0945-00816-1000
470 uf AX. ELEC.	2	C102, 114	0945-00816-0600
2200 µf " " 25 V	1	C115	0945-00816-1300
4700 uf " " "	1	C116	0945-00811-0700
25,000 µf " "	1	C104	0945-00816-1700
40,000 µf " "	1	C113	0945-00816-1800
0.16 ohm 15W 5%	1	R103	0945-00815-0100
0.18 " 5W 5%	1	R102	0945-00815-0200
10 " 1/4W 5% CRBN	1	R126	0062-051B3-1XXX
24 " " " "	1	R105	0062-065B3-1XXX
25 " 5W 10%	1	R124	0945-00815-1000
68 " 1/2W 5%	3	R104, 125, 134	0062-098D3-1XXX
100 " 1/4 W 5% CRBN	1	R100	0062-110B3-1XXX
150 " 2W 10%	1	R132	0945-00812-0200
270 " 1/4W 5%	1	R106	0062-138B3-1XXX
470 " " "	1	R101	0062-156B3-1XXX
560 " " "	1	R114	0062-162B3-1XXX
1K " " "	2	R127, 129	0062-179B3-1XXX
1.2 K " " "	1	R113	0062-183B3-1XXX
6.2 K " " "	1	R128	0062-217B3-1XXX
100 ohm POT	3	VR 100, 101, 102	0945-00814-0000
A15F 50V 5A DIODE	7	D110 - D116	0945-00804-0200
IN4001	3	D103, 108, 109	0945-00804-0300
MR 750	2	D106, 107	0945-00804-0800

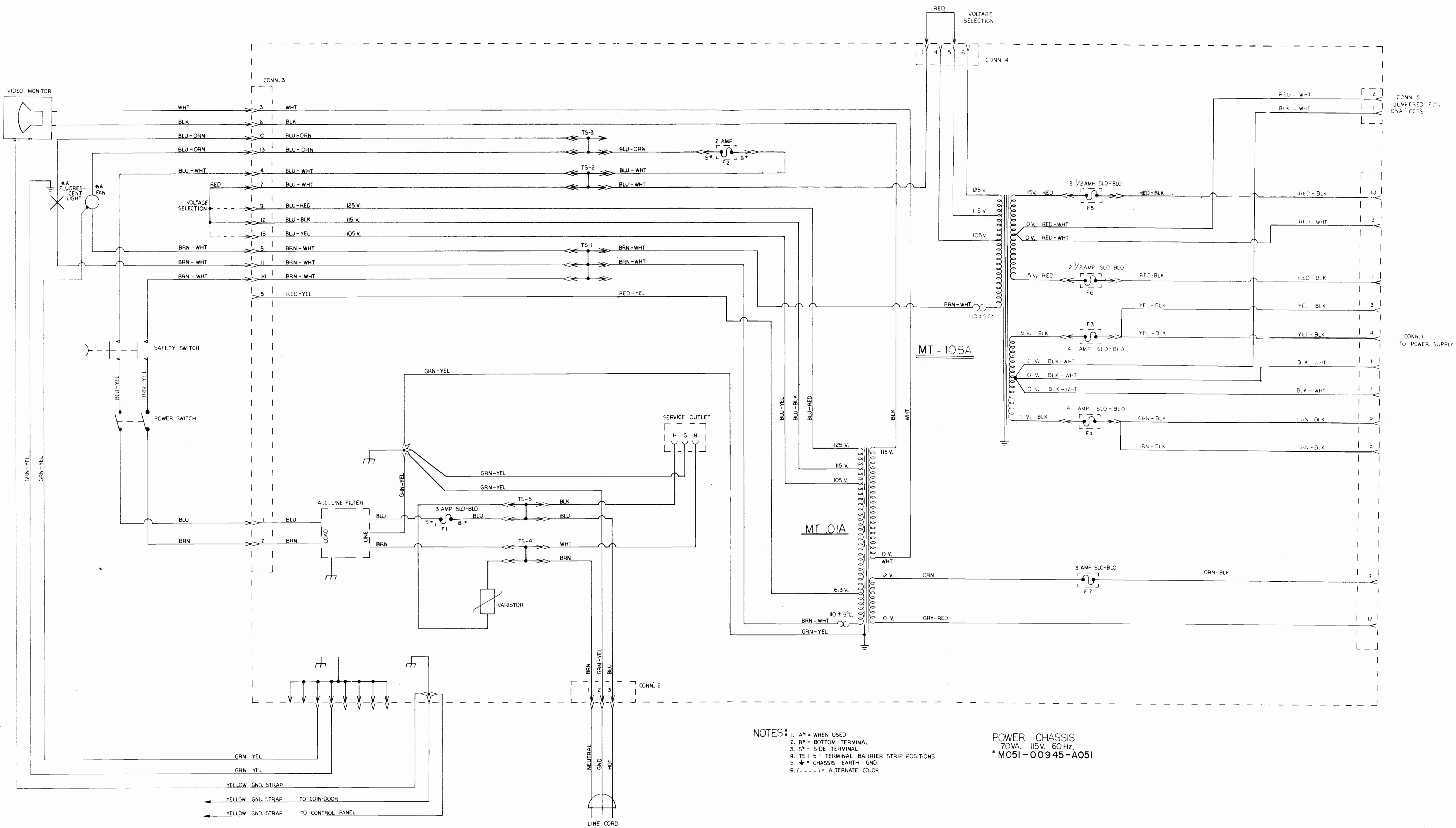
DESCRIPTION	QTY	DESIG. NOS.	PART NOS.
2N2905	2	Q102, 104	0945-00808-0300
LM305	2	U2, U5	0945-00813-0100
FERRITE BEAD	2	FB1, FB2	0017-00009-0225
FERRITE MTG. HDRW.		FBMH1, FBMH2	
20 G SOLID WIRE	2	FBMH1, FBMH2	0017-00033-0139
HEAT SINK ASSY	1	HSA1	A945-00008-0100
4-40 X 10 SLT RND	2	HSA1	0017-00101-0727
WSH, 4, 120-.250-018	4	HSA1	0017-00104-0071
4-40 HEX NUT	2	HSA1	0017-00103-0002
FUSE, 1/4 A SLO-BLO	1	F1	0017-00003-0446
FUSE, 1 AMP	1	F2	0017-00003-0001
FUSE CLIP W/STOP	4	F1, F2	0017-00071-0033
2 POS. KK-156 CONN.	1	J1	3000-16387-0200
5 " " " "	2	J1, J2	3000-16387-0500
6 " " " "	1	J2	3000-16387-0600
13 " " " "	1	J1	3000-16387-1300
22 AWG 2 1/2 IN.	3	JW1, JW2, JW3	0151-00087-0000
TIE WRAP 7 5/8 IN.	2	TW3, TW4	0945-00814-0300
TIE WRAP 10 3/4 IN.	2	TW1, TW2	0945-00814-0400
TAG, FUSE 1/4 A. SLO-BLO	1	LB1	M051-00945-A020
TAG, FUSE 1 AMP	1	LB2	M051-00945-A021
TAG, PWR SPLY I.D.	1	LB3	M051-00945-A022
70 VA PWR SPLY P.C.	1	———	A080-90421-C000
HEAT SINK ASSY	1	———	0017-00033-0139

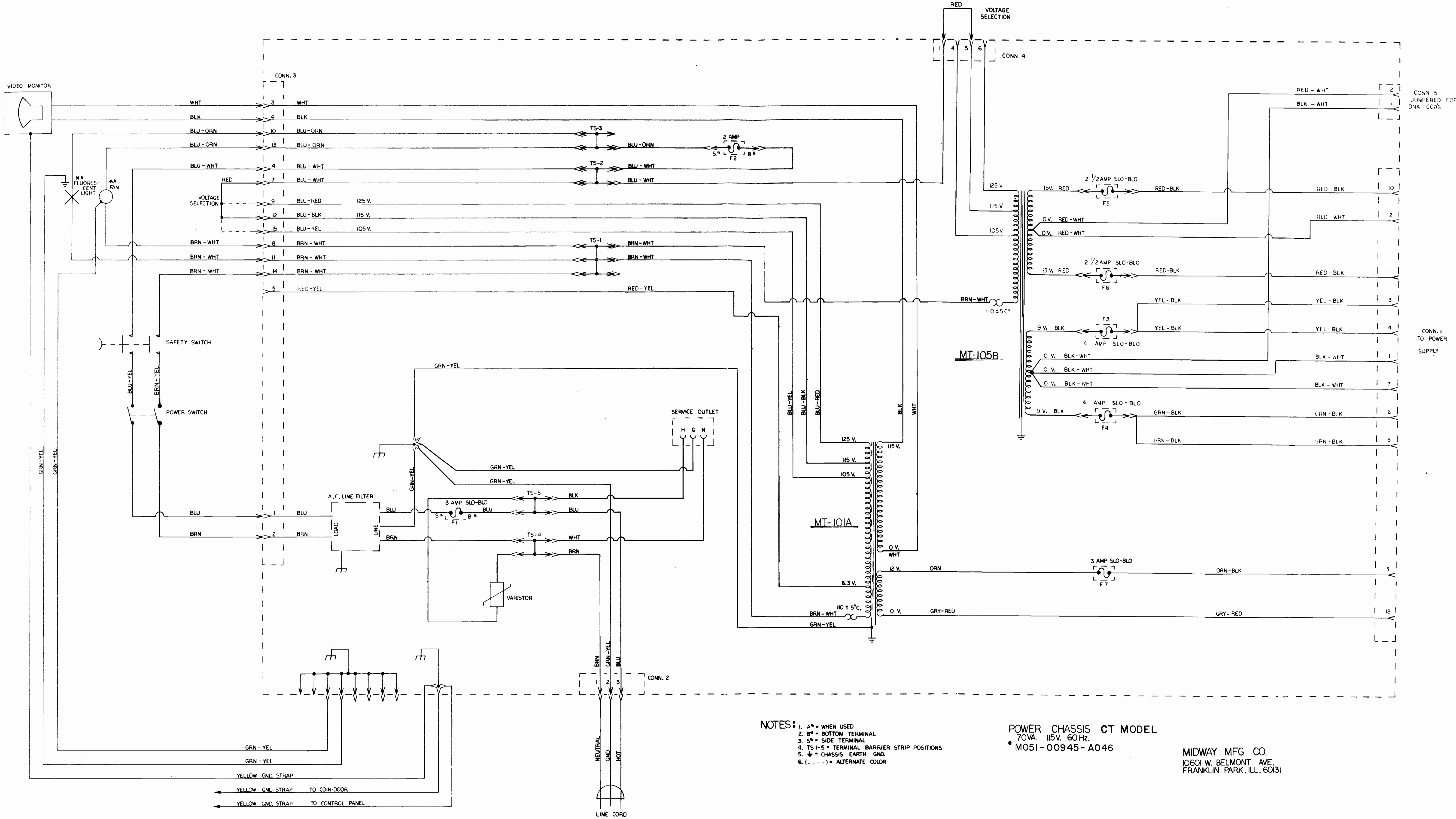
REVISIONS

PROJECT ENG J. JARON		USED ON BLUEPRINT	Bally / MIDWAY MFG. CO. FRANKLIN PK ILL.
DO NOT SCALE DWG	HEAT TREAT	SCALE FULL	NO. REQ'D 1 PER
DIM TOLERANCES UNLESS SPECIFIED	DRN TBB	MAT'L.	
	CKD.	FINISH	
	DATE 12/2/82		
ASSY DRWNG. MED P.S. 70 VA (A082-90421-C000) A082-90427-A000			PART NO. M051 - 00945 - A031



MEDIUM PWR. SUPPLY 70 VA
A082-90421-C000
M051-00945-A032
MIDWAY MFG. CO.
12/02/82
115 VAC
14.5 VAC
9 VAC
COMMON
0 VAC
12 VAC
J2
J1
D110 A15F
D111 A15F
Q100 2N3772
FB1 FERRITE BEAD
R102 0.18 5W
+12V / 2 AMP
C118 0.1µf
R125 68 1/2W
F1 1/4 AMP S.B.
JW1
D103 1N4001
Q104 2N2905
U5 LM305
C104 25,000µf 35V
R124 25 5W
R126 10
R127 1K
R128 6.2K
C114 470µf 25V
VR102 100 POT
R129 1K
C121 0.1µf
C117 47pf
SENSE
COMMON
V. BATT 5
D107 MR750
D106 MR750
F2 1 AMP N.B.
≈8V
COUNTER DRIVERS 17
Q101 2N3772
FB2 FERRITE BEAD
R103 0.16 15W
+5V / 4 AMP 18
19
21
22
KEY 20
C111 0.1µf
R104 68 1/2W
Q102 2N2905
C113 40,000µf 16V
U2 LM305
R113 1.2K
R105 24
VR101 100 POT
C102 470µf 25V
R134 68 1/2W
C105 4.7µf 35V TANT
R106 270
C106 0.1µf
R114 560
C107 0.1µf
COMMON 13
14
15
COMMON 16
COM.
JW2
VR100 100 POT
R100 100
C115 2200µf 25V
C101 0.47µf 25V TANT
C100 10µf / 16V TANT
– SENSE 9
D109 1N4001
D108 1N4001
U1 79M05
R101 470
– 5V/0.45 AMP 2
JW3
UNREG. AUX. V.
CONTR. LAMPS / 2 AMP 3
D112 A15F
UNREG. FILTERED V
AUDIO CKT. / 2 AMP AVG. 1
D114 A15F
D113 A15F
R132 150 2W
C116 4700µf 25V
D115 A15F
D116 A15F
RTN. AUX. V.
CONTR. LAMPS 11
AUDIO CKT 12
AC SYNC 10
RESET 4
KEY 6
KEY


VIDEO MONITOR
CONN. 3
CONN. 4
CONN. 2
RED
VOLTAGE SELECTION
CONN. 5 JUMPERED FOR DNATCOAS
CONN. 1 TO POWER SUPPLY
*A FLUORESCENT LIGHT
*A FAN
SAFETY SWITCH
POWER SWITCH
WHT
BLK
BLU-ORN
BLU-WHT
BLU-RED
BLU-BLK
BLU-YEL
BRN-WHT
RED-YEL
GRN-YEL
RED-WHT
BLK-WHT
RED-BLK
YEL-BLK
ORN-BLK
GRY-RED
125 V.
115 V.
105 V.
TS-1
TS-2
TS-3
TS-4
TS-5
2 AMP
F2
2 1/2 AMP SLO-BLO
F5
F6
F3
4 AMP SLO-BLO
F4
3 AMP SLO-BLO
F1
F7
MT-105A
MT 101A
SERVICE OUTLET
H G N
A.C. LINE FILTER
LOAD
LINE
VARISTOR
YELLOW GND. STRAP
YELLOW GND. STRAP TO COIN-DOOR
YELLOW GND. STRAP TO CONTROL PANEL
NEUTRAL
GND
HOT
LINE CORD
NOTES:
1. A* = WHEN USED
2. B* = BOTTOM TERMINAL
3. S* = SIDE TERMINAL
4. TS 1-5 = TERMINAL BARRIER STRIP POSITIONS
5. ⏚ = CHASSIS EARTH GND.
6. (- - - -) = ALTERNATE COLOR
POWER CHASSIS
70VA. 115V. 60Hz.
*M051-00945-A051



NOTES:
1. A* = WHEN USED
2. B* = BOTTOM TERMINAL
3. S* = SIDE TERMINAL
4. TS1-5 = TERMINAL BARRIER STRIP POSITIONS
5. ⏚ = CHASSIS EARTH GND.
6. (-----) = ALTERNATE COLOR

POWER CHASSIS CT MODEL
70VA 115V. 60Hz.
*M051-00945-A046

MIDWAY MFG. CO.
10601 W. BELMONT AVE.
FRANKLIN PARK, ILL. 60131